DOCUMENT RESUME

ED 363 061 EC 302 518

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TITLE Let Community Employment Be the Goal for Individuals with Autism.
INSTITUTION Indiana Univ., Bloomington. Indiana Resource Center for Autism.
PUB DATE 93
NOTE 71p.; For the earlier version, "Vocational Programming for Students with Autism," see ED 316 005.
AVAILABLE FROM Indiana Resource Center for Autism, Indiana University, 2853 E. Tenth St., Bloomington, IN 47408-2601 ($5).
PUB TYPE Guides - Non-Classroom Use (055)

EDRS PRICE MF01/PC03 Plus Postage.
DESCRIPTORS *Autism; *Career Counseling; Education Work Relationship; Federal Legislation; Secondary Education; Social Integration; State Legislation; *Supported Employment; Transitional Programs; Vocational Education; *Vocational Rehabilitation
IDENTIFIERS Indiana

ABSTRACT

This vocational program book is intended to assist vocational rehabilitation counselors in moving toward the goal of community employment for people with autism. The first section considers vocational issues for this population and discusses the following: autism and work, educational experiences/programming, vocational evaluations, purposes of behavior, communication skills, social skills, sensory stimulation, instruction, support systems, interests and strengths, motivation, staff training, and phases of a supported work model for use with people with autism. The next section looks at longitudinal planning, including the parents' perspective and role and the development of work behaviors (e.g., communication, social skills, rate and production, and accuracy and quality). The last section looks at the transition from school to work, including responsibilities for the transition process, the role of the Indiana Office of Vocational Rehabilitation, the transition planning timeline, related federal laws, and Indiana state laws. Appendices provide additional information on: characteristics of people with autism, employment programs, examples of jobs that people with autism have done successfully, guidelines for individual assessment, a vocational evaluation checklist, individual assessment of support systems, the use of adaptations and enablers, a sample task analysis, and a sample resume. (Contains 61 references.) (DB)

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INSTITUTE • *for the* • STUDY • *of* DEVELOPMENTAL DISABILITIES

– A University Affiliated Program –

Let Community Employment Be the Goal For Individuals with Autism

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EC 302515

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Printed in the United States of America, 1993

Acknowledgements

Our sincere thanks go to:
Rozella Stewart for valuable input,
Jill Dalrymple for the drawings,
Rory Suomi for support and professional expertise, and
All the children and adults with autism whom we have known.

This vocational program book is a revision of Vocational Programming for Students with Autism, published in 1986 by the Indiana University Developmental Training Center and a training packet designed in 1991 to train vocational rehabilitation counselors.

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Section 1

VOCATIONAL ISSUES AND IMPLICATIONS FOR EMPLOYMENT FOR INDIVIDUALS WITH AUTISM

Introduction: Autism and Work

Individuals with autism need to be taught and supported by people who understand them and their disability. Autism is a developmental disability that results from a brain dysfunction. It affects approximately one in 1000 people. About eighty percent of persons with autism also have mental retardation. Autism can occur with other disabilities such as deafness, Down syndrome, Fragile X syndrome, and epilepsy. People with autism vary in intellectual levels and behavioral characteristics as well as in abilities. Autism is a lifelong disability that begins in infancy or early childhood.

Autism is a severe disorder that is characterized by intellectual impairments in communication, social interaction, and reaction to stimuli (Appendix A). Fortunately, it is not a vocational disorder. People with autism can work, and even those with severe problems can hold a variety of jobs (Smith, 1990). Increasing numbers of people with autism throughout the world are working as piano tuners, library assistants, carpenters, artists, laboratory employees, maintenance workers, amusement park employees, print shop assistants, waiters, assemblers, and office workers (Blake, 1990).

A job is more than a task or activity. Success on a job involves getting along with co-workers, behaving in socially appropriate ways, and communicating with others - all skills that are difficult for a person with autism to master. It is now clear, however, jobs that capitalize on the strengths and not jeopardized by the weaknesses of people with autism can be found (Smith, 1990).

Ruether states (cited in Bishop & Falvey, 1989, p. 165), "We do not exist in order to work, but we work in order to be." Work can be a major component of personal identity and quality of life for all people. Success with a job enhances self-esteem and social status and promotes independence. Successful work also builds self confidence and opens opportunities for social interactions and relationships (Wehman, Kregel, Barcus, & Schalock, 1986). Until recently community employment for people with autism was virtually unheard of, even jobs in sheltered workshops were scarce. Today however, a growing number of programs are offering job skills training to individuals with autism (Blake, 1990). New areas of employment for workers with autism are opening, and it appears likely that the trend will continue (Holmes, 1990). As education and programming improves, people with autism will be leaving school with better skills for working in the community (Holmes, 1990). This book is designed for all who are responsible for preparing individuals with autism to enter the adult work world. A supported work approach to competitive employment has evolved from Madeline Will's point of view (1985); she believes that all youth with disabilities in schools are capable of moving from school to employment, with necessary support services tailored to the needs of these individuals.

Individuals with autism have responded well to meaningful jobs in integrated community settings. They can learn a job and essential related work behaviors at community employment sites that use the "place-train" model (Dalrymple & Angrist, 1986; Juhrs & Smith, 1989). Supported employment programs are designed to "place-train" (place on a job site and train job-related behaviors) rather than

"train-place" (train in simulated settings, then place in a job). Since people with autism have distinct difficulties generalizing skills learned in simulated situations (Donnellan, 1981), they are in particular need of opportunities to participate in vocational training programs that use the "place-train" model of supported employment. This model promotes and teaches essential work behavior in natural settings. Individuals who are severely handicapped with challenging behaviors usually have not been considered for placement in community jobs until their work behaviors are appropriate in more restricted settings (Duran, 1987; Juhrs, 1985). People responsible for providing vocational programs for persons with autism must change the previously stated approach and work towards increasing the number of individuals with autism employed competitively in the community (Appendix B and C).

Persons with severe handicaps can function in environments that contain large numbers of non-handicapped people (Brown et al., 1985). They work better, achieve more, and have a richer quality of life when they work alongside non-handicapped workers. The supported work model promotes these objectives by helping people with developmental disabilities access work environments traditionally dominated by non-handicapped peers. Supported employment programs have demonstrated that this historically unemployed population can gain entry and be successful in the labor force (Wehman & Moon, 1981).

Successful job training programs (Patterson, et al. 1991; Juhrs, 1985) have provided information regarding vocational training in community job sites for individuals with autism. Research has demonstrated the usefulness of positive behavior management techniques for people with autism (LaVigna & Donnellan, 1986), and the benefits of using these techniques when training people with autism to work in community settings have been discussed (Duran, 1987). The following section reviews vocational issues specifically related to employment of individuals with autism in the community.

EDUCATIONAL EXPERIENCES/PROGRAMMING

Tomorrow, a child will be identified as having autism. The challenge to educators is to equip this child with skills that will enable him or her to live and participate in the community as an adult. The challenge is to teach lifetime skills that will prevent eventual institutionalization, the outcome that previous generations of people with autism have often endured (Donnellan, 1981).

Recently, the need for a functional curriculum for all people who are severely handicapped has been emphasized. This principle is particularly crucial to the education of individuals with autism (Donnellan, 1981). Providing a functional curriculum does not necessitate eliminating academic skills for individuals who need them; it does, however, emphasize teaching skills that the person with autism will need and will actually use outside of school and throughout his or her lifetime.

For people with autism to avoid institutionalization and adjust successfully in the community, it is necessary to develop curricula that relate to teaching functional skills across areas, i.e., community, domestic living, recreation/leisure, work, and social interaction with peers. Therefore, a significant portion of the educational experience should take place in various school and non-school environments in which the person lives, works and recreates. The older the student becomes the more time s/he should spend in restaurants, stores, and Y-Centers, learning to ride public transportation and learning various work experiences (Donnellan, 1981). People with autism need an educational curriculum that is functional, integrated, and longitudinal rather than artificial, segregated, and episodic (Donnellan, et.al., 1980).

Many people agree that vocational training must begin as soon as possible in an individual's education and must be coordinated from training site to training site so that the individual's experiences build upon each other (Lynch, 1984; Wehman, 1983). Vocational training for preschool and elementary-age students might consist of learning to perform chores in the classroom, schoolyard, and at home (Bishop and Falvey, 1989). Junior and senior high school students might learn jobs such as bussing tables, delivering newspapers or cleaning hotel rooms (Bishop and Falvey, 1989). Individuals with severe handicapping conditions are more likely to achieve success as adult workers when they are trained in community-based programs (Gaylord-Ross, Forte, & Gaylord-Ross, 1986). Vocational training in school not only provides a variety of work experiences but also helps develop work behaviors and adds assessment information about what the person likes and does well (Gaylord-Ross & Halvoet, 1985).

Implications for Employment:

We must provide a greater range of educational and employment programs today if more people with autism are to be employed as cooks, office workers, gardeners, and library assistants in the future (Blake, 1990).

VOCATIONAL EVALUATIONS

Supported employment is a community employment service which is available for individuals with disabilities upon leaving the school system. Supported employment programs for adults with a disability such as autism focus on facilitating an individual's successful participation in integrated work settings with non-handicapped workers for at least twenty hours per week (see page 26). These programs have provided an alternative to the traditional sheltered workshop service delivery model. Supported employment has been successfully implemented with individuals with mental retardation (Rusch, 1986; Bates, 1986; Wehman, Dregel, Barcus, & Schalock, 1986), autism (McCarthy, Fender, & Fender, 1988), physical disabilities (Wood, 1988), and many other severe disabilities.

Access to supported employment programs in the adult service system, however, still depends on the results of a vocational evaluation. For many years, vocational evaluations have played a role in the rehabilitation and training process for individuals with autism and other disabilities. Yet, assessment has not assisted individuals with disabilities such as autism in obtaining community employment (Manchetti & Flynn, 1990). For example, the "traditional" purpose of a vocational evaluation is to provide a "yes/no" answer to the question of employability for the individual with a disability. This clearly conflicts with the concept of supported employment that has three distinguishing characteristics: 1) supported employment services should be targeted for individuals, such as persons with autism, who traditionally have not succeeded in competitive employment; 2) services should be provided in integrated community settings; and 3) services should include the provision of longterm support from a variety of agencies and sources which most individuals with autism need (Wehman, Kregel, Barcus, & Schaloxk, 1986). Therefore, if the result of a vocational evaluation is "no" (no employment potential), the individual with autism will not have access to the opportunity to learn skills in community employment.

Unfortunately, "traditional" vocational evaluation tools and practices (such as paper and pencil tests, manual dexterity tests, multiple aptitude batteries, work sample, and vocational behavior checklists do not adequately measure the vocational potential/skills of the person with autism (Davis, 1990; Sitlington, Dalrymple & Dewees, 1986). Reasons for this include: 1) verbal tests seldom take into account the

communication deficits of people with autism; 2) many scoring and interpretation practices fail to acknowledge that testing procedures and environments are new to the person being tested, and individuals with autism typically have difficulty adapting to change and performing in unfamiliar situations; and 3) inexperienced and/or untrained evaluators fail to recognize that procedures used to test individuals with other disabilities are seldom effective in determining the vocational potential of individuals with autism. Standardized tests are artificial and usually are presented out of context. Therefore, it is short sighted to think that persons with disabilities would receive a valid assessment using artificial materials, and activities in artificial environments (Hursh & Kerns, 1988).

Implications for Employment:

If individuals with autism are to have opportunities for employment as adults, all who are responsible for their programming - parents, teachers, vocational rehabilitation counselors, vocational evaluators, adult service providers, and others- must cooperate to develop vocational evaluation tools and procedures that positively identify each individual's vocational potential. If valid results are the outcome, a multidisciplinary team of individuals who know the person with autism should collaborate systematically to identify individual strengths and weaknesses and to link findings with potential job placements (Appendix D & E).

PURPOSES OF BEHAVIOR

Rehabilitation of people with autism, including employment in the community presents unique challenges to service provider (Levy, 1983; Mesibov, Schopler, & Sloan, 1983). Behaviors that may be typical of individuals with autism such as self-stimulatory behaviors, self-injurious behaviors, temper tantrums and excessive activity are incompatible with successful community employment (Mesibov, Schopler, & Sloan, 1983). If people with autism are to be successfully employed in the community, problem behaviors need to be replaced by functional skills that achieve the same purpose. Therefore, it is essential to use positive behavioral techniques in order to make community employment a realistic goal for people with autism (Smith & Coleman, 1986). This approach should be taken throughout the person's life, so the emphasis is on increasing skills rather than merely extinguishing interfering behaviors.

Job coaches who are providing the "place-train" supported employment model to people with autism need to expect that job threatening behaviors or circumstances might develop (Smith, 1985). Therefore, an optimistic and positive problem-solving support system needs to be in place to efficiently analyze the purposes of interfering or inappropriate behaviors and maintain community employment. Smith (1985) writes:

> *If the standard reaction to an apparently job threatening behavior problem is to terminate employment or change worksites, then one might find in time there are no worksites left to move to. Yet, if a problem-solving process exists which systematically identifies the purpose of the behavior, designs a positive solution, teaches and implements the skills needed to replace the problem behaviors, the person with autism could remain at the job site. (p.5)*

Implications for Employment:

In order to reduce a workers's problem behavior, the job coach needs access to an interdisciplinary problem-solving team. Members of the team need to understand the importance of determining the possible functions that the behaviors might serve for the individual with autism (McCarthy, Fender, & Fender, 1988). The job coach needs to be aware of various tools that could assist with the functional analysis of behaviors (Durand, 1990). It is important for job coaches to analyze the communicative intent of a worker's behavior so that steps can be taken to teach appropriate alternative behaviors. "All behavior is considered to be communicative" (Donnellan, Mirenda, Mesaros, & Fassbender, 1984, p. 202).

Job coaches need to be aware that disruptive behaviors could result from a feeling of anxiety or stress due to changes in routines and/or lack of understanding of expectations. Therefore, the job coach needs to take extra steps to assist the worker with autism to organize the new work environment and to feel comfortable. "Non-aversive behavioral techniques used during job-site training are effective in reducing or eliminating disruptive behaviors of an employee [with autism]" (McCarthy, Fender, & Fender, 1988, p. 281). Therefore, job coaches need to receive training in non-aversive behavioral training techniques before working with individuals with autism who display challenging behaviors.

Key points that relate to people with autism who have behavioral challenges include: (1) behaviors should not be used as a determining factor or reject an individual for a community job site, (2) reducing behaviors can be addressed using non aversive behavior techniques, (3) positive behavior strategies should be implemented at the community job site, and (4) job coaches must understand how to teach individuals with autism.

COMMUNICATION SKILLS

Impaired communication is a primary characteristic of autism (Faye & Schuler, 1980). Other difficulties related to autism, such as aberrant behavior, often result from poor expressive and/or receptive communication (Donnellan, Mirenda, Mesaros, & Fassbender, 1984; LaVigna & Donnellan, 1986). Fifty percent of people with autism develop no spoken language, and some others have speech, but it is primarily either echolalic (partial or complete repetition of an utterance made by someone else) or two and three word phrases (Smith, 1990). Prizant and Duchan (1981) postulate that echolalia often serves several functions for a person, including turn-taking, declaration, yes-answer, request, rehearsal, and self-regulation. People with autism who have language might have peculiarities in grammar, volume, rate, rhythm, pitch, intonation, and unusual content at times (Smith, 1990).

In addition, a person with autism generally has poor receptive language skills because of difficulties in processing information. As a result s/he may become extremely cue dependent, such as waiting for a verbal cue in order to perform the next step of a sequence (McCarthy, Fender, & Fender, 1988).

Implications for Employment:

When providing job site training with the "place-train" supported employment model, communication difficulties for the individual with autism must be addressed by the job coach in order to maximize success and minimize failure. The following suggestions address communication issues (McCarthy, Fender, & Fender, 1988):

- Gather information about past communication systems from parents, past teachers, and friends.
- Analyze the potential receptive and communicative requirements of a job.
- If the expressive and receptive communication requirements exceed the individual's abilities, develop a non-speech (augmentative communication system. For example, as part of the job, the person who is nonverbal has opportunities to order lunch in the company's cafeteria using specific pictures or cards to communicate choices.
- People with autism who have poor receptive skills often perform better with concrete visual cues (McCarthy, Fender, and Fender, 1988). The steps and duties needed to do a job must be sequenced before beginning to train an individual with autism. Once the steps have been determined, written lists or picture schedules should be developed.

The lack of communication skills should not be used as a determining factor for job placement for persons with autism. Gains in communication can be achieved despite the severity of the disorder (Smith, 1990). People who do not have speech can usually be taught alternative means of communication.

SOCIAL SKILLS

Autism is characterized by impaired ability to participate in social relationships (Smith, 1990). Social skills is the area in which people with autism show the greatest deficit and one that is probably the most critical vocationally (Mesibov, Schopler, & Sloan, 1983). People with autism do not understand social rules. As a result, they usually present themselves as withdrawn with stilted or abnormal mannerisms (Wing, 1978). Individuals with autism do not engage in cooperative, reciprocal interactions with others (Mesibov, Schopler, & Sloan, 1983). Social behaviors that usually come naturally to people without autism, such as greeting others and inquiring about topics of interests to the other person, are often absent in people with autism.

Implications for Employment:

Individuals with autism must be taught appropriate social behaviors required at the job site (McCarthy, Fender, & Fender, 1988). The job coach can train other co-workers to understand the basis of unusual social skills of the individual with autism (Duran, 1987). Job coaches can also offer suggestions to the other workers on how to respond and interact with the person with autism.

Even though people with autism may have some different mannerisms, this should not be a reason to keep them from placement in community jobs. Individuals with autism can be systematically taught skills that can improve their social functioning in natural environments (Smith, 1990); Mesibov, Schopler, & Sloan, 1983).

SENSORY STIMULATION

Autism is associated with unconventional reactions to sensory stimulation (Grandin, 1988). Apparent disregard for some types of stimulation has been observed in individuals with autism. For example, someone might speak and not receive any sign of acknowledgement from an individual with autism; a person with autism may walk barefoot in the snow, or walk in front of cars. On the other hand there may be a strong reaction to other sensory stimulation such as a clock ticking or an air conditioner humming. A person with autism might have a fascination with certain types of stimulation such as smells, visual events like spinning objects, and touching textures. Many of the repetitive behaviors associated with autism, such as rocking, finger flicking, and twirling, at least in part serve the purpose of providing sensory stimulation.

Implications for Employment:

Job coaches should identify sensory interests and needs. Sensory interests could be used in teaching situations by using the preferred stimulus to reward desirable behaviors and to incorporate into the job.

Non-aversive behavior strategies have been effective in addressing sensory activities. For example, a person with autism who rocks could use a rocking chair at a designated time to satisfy the need to rock, or an individual who picks his or her skin in order to smear blood might give this up when provided with lotion to rub on his or her skin.

Sensory deficits should not be used to reject individuals with autism from placement in community jobs. With education and training, people with autism can learn more acceptable sensory activities to replace inappropriate ones.

INSTRUCTION

Kanner's studies (1971) indicated that persons with autism have normal or above normal intelligence but may be functionally retarded as a result of their other difficulties. However, more recent research indicates that the majority of persons with autism have mental retardation, with about sixty percent having a measured IQ below 50. People (teacher, parents, speech therapists, job coaches) who are faced with the task of teaching individuals with autism is their uneven development. An individual with autism can be competent in some areas while functioning much lower in others. Therefore, it is often difficult to establish what the individual with autism can and cannot do. Assessing and planning is vital when teaching persons with autism. Their abilities vary from one individual to the next; hence, there is no cookbook or recipe for teaching them.

Although research indicated that higher intelligence is not correlated with success on a job (Hill, et al., 1985), the retardation variable must be considered when determining techniques to use in training an individual with autism for a job. According to Grandin (1990), many people with autism have problems remembering the sequence of a set of instructions. People with autism often perform best with written/picture instructions that they can refer to rather than only verbal instructions or demonstration of the task. People with autism require more time to shift their attention from one stimuli to another. Grandin (1990) states, "If a person with autism was distracted before s/he was given verbal directions, the performance of the task will be poor. The effects of distraction could be due to the difficulties in shifting attention."

Implications for Employment

Systematic instructional techniques must be used in training persons with autism. People with autism are concrete learners. People with autism have difficulty with abstract concepts and prefer the visual modality rather than the auditory modality for learning (McCarthy, Fender, & Fender, 1988). Job coaches need to determine which is the best instructional method or combination of methods to use with the individual: visual, auditory, modeling, prompting systems, written or picture instructions.

Generalization difficulties are often experienced by persons with severe handicaps such as autism (Koegel, 1982). Therefore, teaching the tasks in the actual job environment ensures the cues that are important during training remain the same after training. A task analysis is critical. When teaching people with autism it is important to teach the steps in the same order each day and in a way that leads to independent performance (Appendix H).

Various instructional strategies can be used with individuals with autism. The teaching or instruction of people with autism is one of the most challenging aspects of the job coaching experience. The job coach, needs to use the most positive behavioral and instructional technology available to assure job success for the individual with autism (Smith, 1990).

SUPPORT SYSTEMS

Smith (1985) states:

> *People with autism can vary greatly in their presenting problems, as well as in their skills and abilities. Although any one individual who has autism might have his/her needs met by addressing one critical problem or symptom area, this approach cannot be used uniformly for all persons with autism. To account for the complexity of the disorder, a multi-dimensional approach must be taken in order to determine necessary support.*

Implications for Employment:

Once the team has determined the type of support needed for vocational success, it is critical that the support be provided. It is likely to be more effective to provide ample support at the onset of job training and then routinely evaluate the supports as success is being demonstrated. Be aware that fading support systems too quickly for the individual with autism could result in loss of a job. (Appendix F & G).

A person with autism may need various forms of support longer than individuals with other developmental disabilities. Support services cannot be time bound because of financial restraints if people with autism are to continue to work successfully. It is essential to the success of community employment for the individual with autism that supports be fully identified, provided, and maintained. Some supports should remain forever.

INTERESTS AND STRENGTHS

The interests and strengths of individuals with autism can seldom be assessed through the traditional, standardized method of interest surveys due to communication impairments, unfamiliarity with testing procedures, and problems with generalization (Sitlington, Dalrymple, & Dewees, 1986). Like everyone else, people with autism have strengths and preferences of activities, food, people, and environments. These strengths can be noted through structured observational techniques as well as through interviews with the individual's parents, siblings, guardians, and other professionals who have worked with the person in the past.

People, including persons with autism, usually perform more effectively and efficiently if they are doing what they like to do. Matching the job to the person's interests, preferences, and strengths greatly enhances the chances that the person will be successful.

Implications for Employment:

Ritualistic behaviors which might be considered as weaknesses could be turned into assets in job performance when considering job placement and training. For example, for a person with autism who perseverates, the job coach could locate jobs that are repetitive such as greasing pans for a pizza parlor or folding towels in a laundry (McCarthy, Fender, & Fender, 1998). Compulsive behavior resulting form insistence on sameness could be used for job routines that must be performed exactly the same way; e.g., making pizza dough, cleaning motel rooms, wrapping silverware, and assembly manufacture jobs.

Individuals with autism sometimes have narrow interests in certain topics (people's birthdays); however, they can be taught to limit the time spent on these topics. It is not desirable to totally eliminate topics of interests, but rather expand the topics as well as teach the limits and rules about topics. They will need to be taught what to talk about, how to greet, and converse in the work place.

When planning a job training program and/or developing community jobs for individuals with autism, it is much more important to know what they can do rather than what they cannot do (Dalrymple, 1989b). Limited strengths or interests should not be a reason for excluding the individual from a community job. However, it will take creative thinking and team brainstorming to develop a community job for a person with autism who has limited strengths and interests.

MOTIVATION

Perhaps one of the more difficult areas to understand when teaching people with autism is how to motivate them to want to do what others do (Dalrymple, 1989a). Motivation of good work behaviors is especially critical (Smith, 1985). Yet, some people with autism may not understand or be motivated by money, even though they are earning wages. Often, the worker with autism is not intrinsically motivated to initiate and/or perform tasks (McCarthy, Fender, & Fender, 1988). Therefore, a more immediate, external motivational system may need to be employed at the job site.

Implications for Employment:

Job coaches need to develop motivational systems at the job site for the individual with autism based on assessment of likes and preferences. This could be an effective tool in training for initiation and independence (Dalrymple, 1989a). Sharing experiences, being valued and recognized, and having concrete ways to see accomplishments all help motivate individuals with autism.

Job coaches can provide choices of tasks or encourage the individual to choose what task to do first. The job coach can alternate less preferred activities with preferred activities by providing information visually, e.g., schedule boards or choice boards. "Making choices and understanding expectations are ways to exert one's independence and to exert control over one's world" (Dalrymple, 1989a).

STAFF TRAINING

Donnellan (1981) has advocated for intensive and systematic training for those who work with individuals with autism. There is little empirical data on the effectiveness of training staff of program services for individuals with autism; yet interest in providing training seems strong. Some states now have resources available to provide staff training.

Job coaches can enter the field with little or no experience, provided they receive intensive training in autism and behavior management once hired (Smith, 1990). With good initial training, follow-up at the job site, and ongoing monitoring, job coaches can become competent in providing on-the-job support to workers with autism and have a successful, positive job placement. A key to successful employment for people with autism is for rehabilitation professionals to be familiar with the disability of autism and what it means in terms of how a person learns, so that support services can be matched and individualized accordingly (McCarthy, Fender, & Fender 1988).

Implications for Employment:

Job coaches should receive training in the area of autism. According to Indiana Article 7 (page 35), teachers in the educational system are required to receive training in the area of autism. Although, this is not yet a mandate for adult service providers such as job coaches, the authors strongly advocate that job coaches receive training.

Training for job coaches needs to be ongoing in the areas of positive, non-aversive behavior management techniques, positive program components, and the supported employment "model" phases that include: (a) job development, (b) assessment, (c) training, and (d) follow along specifically for individuals with autism.

PHASES OF SUPPORTED WORK MODEL FOR USE WITH PEOPLE WITH AUTISM

When characteristics of individuals with autism are addressed, the supported work model described by Wehman, Kregel, Barcus, and Schalock (1986) is an effective approach to successfully place and retain these individuals in real community work settings (McCarthy, Fender, & Fender, 1988). The following

section addresses the major considerations of each phase of the supported employment model for job coaches who work with persons with autism. The phases include job development, assessment, job placement, job site training and follow-along and maintenance.

Job Development

The most widely used approach to job development of people with developmental disabilities is to establish a pool of individuals while at the same time searching for jobs without a particular person in mind (Moon, Goodall, Barcus, & Brooke, 1986). Due to the varied factors that must be considered for individuals with autism, a consumer-specific approach is more productive (McCarthy, Fender, & Fender, 1988). With this approach, the job coach uses assessment information and finds a job that matches the individual's abilities and interests. The following points are important to remember when locating jobs for people with autism:

- The job coach may need to consider jobs that require minimal verbal interactions with customers, co-workers, or supervisors. Successful placements with limited communication demands have been made in occupations such as a dishwasher, stockperson, proof operator, plumber, and maintenance person (Fender, 1986).

- As mentioned earlier in the section on strengths and interests, the job coach should build on and use strengths that the individual with autism demonstrates. For example, an individual with autism who is ritualistic might work well at a job that requires repetitive tasks.

- An individual with autism who has severe behavioral challenges still needs to be considered for job development and placement. Look for a job that requires only limited contact with others. For example, a person who is aggressive when around lots of people could be place at a pizza place rolling silverware during hours when the restaurant is closed (Dalrymple & Angrist, 1986).

If more job coaches develop the positive, proactive approach, rather than react to the negative characteristics of individuals with autism, outcomes will demonstrate that these workers can be competitively employed in the community.

Individual Assessment

Appendix E offers an evaluation too that can be utilized to assist with a job match. This type of assessment information will enable job coaches to be more effective in determining abilities and challenges (McCarthy, Fender, & Fender, 1988). An evaluation of the task analysis on the job site, adaptations, and adjustments must be on-going and kept in the worker's file.

Job Placement

Once a job has been developed, it is vital to sufficiently prepare the individual with autism for a major change in his or her routine. Like any person beginning a new job, a person with autism needs to know as much as possible about the job, including what the job is, where it is, what the job entails, and names of co-workers (McCarthy, Fender, & Fender, 1988). The job coach must develop concrete ways to provide this information to the individual with autism.

The job coach should perform the job before the person with autism begins to work at the community site. This will assist the job coach in learning the sequence of duties and in developing task analyses before teaching the job. By using this approach, it avoids teaching routines that later have to be changed, creating potential difficulties for the individual with autism. However, the person with autism may be able to have input into developing the task analysis so that some flexibility in the task analysis may be required. For example, the person with autism may find a more efficient way to perform the task that the job coach has not anticipated.

Job Site Training

While doing job training, the job coach needs to consider the issues discussed earlier in this section, vocational issues and implications for employment.

When doing an initial job analysis of the duties and responsibilities, the job coach needs to identify the communication and social demands of the job. The next step for the job coach is to develop strategies/supports that could be used to teach needed skills in the areas of communication and socialization.

The job coach must remember that people with autism have difficulties processing information. A job coach should make all directions concise and clear. Visual cues such as picture/word schedules and object cues need to be developed and used. These visual enablers can aid the person with autism in understanding and remembering task sequences. Visual schedules support independence and provide a way to predict changes in daily routine.

Instruction should be systematic throughout training. Instructional strategies include task analyses to identify all steps of the job, systematic prompting and fading, and data-based decision-making (McCarthy, Fender, & Fender, 1988). Use modeling and job sharing to teach and to support independence and social interaction.

- The job coach needs to remember that a person with autism may not be intrinsically motivated to initiate and/or perform tasks, nor be able to understand the concept of a paycheck. Therefore, a more immediate motivational system may need to be developed. Job coaches should look for naturally occurring reinforcers in the job setting that might assist with decreasing distractibility, improving rate and production, and/or increasing socially appropriate behavior. Purchasing a pop, buying a snack or talking with a co-worker at break time are examples of possible motivational activities.

- A job coach should serve as a mentor/advocate for the individual with autism by assisting/training/supporting co-workers to understand the communication and social issues associated with the disability of autism. Job coaches also need to develop ways to assist co-workers in communicating and socially interacting with the person with autism.

Follow Along and Maintenance

Before a job coach can begin fading from the job, the individual with autism must have stable performance across time and trainers. Some people with autism are able to perform all aspects of the job independently; however, they might need ongoing supervision, training, and monitoring of program

interventions in the areas of social, communication, and self-management skills. A cost-effective approach that could be used for individuals with autism is to have two or more individuals placed at one site in community jobs, e.g., an enclave (McCarthy, Fender, & Fender, 1988).

The job coach should maintain regular communication with the individual's co-workers and family members throughout all the phases of supported employment. Consistent communication with others is necessary to ensure that the individual continues to be successful at the community site.

- SUMMARY -

McCarthy, Fender, and Fender (1988) write:

> *...the future of people with autism is beginning to look brighter with the development of services such as supported employment that are designed to increase the chances of community integration and productivity for everyone. The availability of supported employment services is still rare for persons who are autistic. (p. 228)*

When a job coach understands and carefully considers the characteristics of the individual with autism, the supported employment model of "place-train" shows promise for employing more individuals with autism in the community. Yet, to assure job success, the job coach needs be trained in two major technologies: positive behavior management and individualized, systematic instruction as they pertain to the person with autism. It is also essential for the job coach/supervisor to develop and maintain close communication with the co-workers, the living support staff, and family/guardians. This communication assists with achieving consistency across environments and people for the individual with autism.

In summary, the information and techniques listed in this book can help open more doors to quality, productive, community jobs for people with autism. The opportunities to engage in interesting, meaningful work, and to have access to peer models, a productive atmosphere, and opportunities for advancement will always be greater in competitive community employment versus sheltered employment. Community employment opportunities for people with autism require determined efforts by more appropriate ones because people with autism have the right and the ability to be productive workers, and they must be provided the chance to do so (Levy, 1983).

Section 2

LONGITUDINAL PLANNING

Parents Perspective and Role

Longitudinal planning for most parents begins before a child is born. The hopes, dreams, and expectations are that s/he will grow up to be all that s/he can be. Some of these dreams may be that the child will be a dad or mom, will be the star basketball player, the U.S. President, own a store, or discover a cure for cancer. Whatever the dreams may be, all parents hope that their child will lead a happy, productive life with family and friends.

For most parents of children with autism these hopes and dreams continue to develop throughout the child's first year or two. Sometimes, even during the first year, parents begin to struggle with the child's slow or uneven development. Usually by the second or third year of life all parents know that something isn't quite right. The child may exhibit slow or abnormal communication and social interaction development. Odd behavior patterns accompanied by strange reactions to people, places, and things may emerge.

Parents begin to alter their focus as the day to day needs for this unusual child consumes them. The child may not sleep or eat well, may become extremely upset, or may be aggressive or self-injurious. S/he is difficult to understand and seems to desperately need a protector and interpreter. Parents try to fulfill these roles as they search for answers about this perplexing child. The more professionals hedge, blame, or critique, the more protective parents may become. Partnerships must be formed. This child needs people who collaborate. There isn't time for adversity among those who care about this person.

Parents' longterm hopes and dreams are often set aside in favor of finding immediate help. Too often they and their child are rejected by friends and even family and assigned negative labels. Parents begin to fight for this child. They become his/her interpreters; they struggle for answers. Sometimes they find family members, friends, caregivers, and professionals who understand and help. Sometimes they trust the expertise and advice of others to later find out they shouldn't have. Ultimately, they are responsible for this child, and deep underneath their daily struggles, the hopes and dreams are still there.

Transitions can be especially difficulty for the child and parents. These transitions may involve new people, new ideas, new places, and new expectations, or simply moving from one place to another. Parents are the constant; they are the only people who see the whole picture. As the child goes into junior high and puberty begins, the realization that an adult will someday emerge often becomes painful and frightening. All parents experience similar thoughts and feelings as their child grows; but parents of children with autism face a very uncertain, unpredictable future for their child. All parents adjust their hopes, dreams, and expectations; but more importantly shift considerable responsibility for decision and choice-making to the child as s/he grows. The wider world has been experienced in small steps, risks have been taken, and successes have been achieved for most. Some interests, strengths, and patterns are emerging that will be used in adult life. Various avenues of choice are collected and weighed.

It might be precisely at this time that options for the child with autism become more confusing. S/he doesn't fit easily into any group or program. Plans are made from day to day and often all longitudinal hopes, dreams, and expectations are abandoned in favor of survival. It is hard to think of a future.

Professionals and others who meet a parent of a child with autism need to think about the road each parent has traveled. Listen carefully. This parent has a wealth of information. Help parents create new hopes and dreams. Help them see that there is a future.

LONGITUDINAL QUESTIONS

Since it is obvious that individuals with autism will not spend their adult lives in classrooms, it is necessary to develop an educational program that relates to teaching functional skills in areas of community skills, domestic living, recreation/leisure, vocational and social interactions with non-handicapped peers (Wilcox & Bellamy, 1982). It is strongly urged that the "instructional classroom setting" be expanded to include longitudinal and comprehensive instruction in a variety of non-classroom and non-school environments throughout the school years and adulthood. Therefore, the following questions need to be asked yearly and can be used as a guide to systematically develop a functional lifelong educational/vocational program for individuals with autism.

Long Range Goals - What will this person be doing 5, 10, or 15 years from now? What functional skills are needed?

1) Where will s/he be living? What activities of daily living skills are needed?

2) Where will s/he work? What work behaviors will be needed (communication, social skills, behaviors, rate and production, accuracy and quality)?

3) What leisure/recreation skills will s/he be doing with others?

4) What general community survival skills will s/he need to know?

5) What will s/he be doing in free or unstructured time?

6) What personal management skills/behaviors will s/he be responsible for?

7) What skills need to be in this school year's program to help reach these goals?

8) How can these needs be translated to functional, useful activities?

Every individual with autism should have the opportunity to participate in a longitudinal, functional, vocational training program. This type of program promotes efficient work behaviors that will lead to the long-term goal of community employment, a quality of life indicator for everyone (Gaylord-Ross, Forte, & Gaylord-Ross, 1986).

Changes in the school system must occur to ensure that all individuals who are severely handicapped, including people with autism, are engaged in a long-term, functional, vocational program. This will require a restructuring of current school services (academics) and development and dissemination of model vocational programs (Paine, 1984). Reforms in school curricula need to be made so that all individuals with autism can have meaningful employment as adults.

DEVELOPING WORK BEHAVIORS

Elder (1985) states the following:

> ***We need to think long-term when it comes to employment. The educational/vocational program services that an individual with a developmental disability receives throughout his or her life must anticipate adulthood. Parents, teachers, and administrators need to think about and plan for future vocational options in the adult world well before school ends. (p.9)***

Relevant vocational training experiences need to occur during the primary, intermediate, and secondary years in order to make the student with a disability more employable during adulthood (Gaylord-Ross, Forte, & Gaylord-Ross, 1986). In schools, development of specific work behaviors and opportunities to experience real work environments should receive major emphasis. School is preparation for adult life. Outcomes of education must be measured by the outcomes of the quality of life of graduates. Bourgondien and Mesibov (cited in Blake, 1990) states:

> ***For individuals with autism vocational...training must emphasize the development of appropriate work habits or behaviors much more than specific job skills. Learning how to work for long periods of time and dealing with changes are typically more difficult for people with autism than the specific job skills a task requires. (p. 1)***

As soon as a child with autism enters school and throughout his or her school years people responsible for educational programming must ask: (a) where will s/he work, (b) what work behaviors/skills will be needed, (c) how can s/he be successful, and (d) how will s/he be part of the adult work life?

Individuals with autism must gain vocational skills throughout their school years to enhance the opportunities for community employment as adults. For individuals with autism of all ages the teaching of independence, the teaching of functional/vocational skills, of work behaviors such as communication, social skills, self-management, rate and production, and accuracy and quality must all be major components of the individual's program in school and in adult life.

It is these work behaviors: communication, social skills, self-management, rate and production, and accuracy and quality that are crucial factors for entering and maintaining employment (Mithaug, Mar, & Stewart, 1978). In this section, each work behavior will be dealt with separately. Samples of goals and objectives and suggestions of ways to develop each will be provided.

While the five areas of work behaviors are of equal importance, not all people with autism need each area targeted on their Individual Educational Program/Habilitation Plans because some may have reached adequate competence in one or more areas. The emphasis placed on each area will depend on an individual's current skill as assessed in formal and situational settings. Table I summarizes five major work behaviors.

WORK BEHAVIORS TO BE TAUGHT TO PEOPLE WITH AUTISM

I. Communication

Communicates basic needs (i.e., asking for help, accessing information)
Initiates contact with supervision
Relays needed information
Understands work routine and expectations
Communicates in appropriate ways

II. Social Skills

Interacts with co-workers and supervisors
Works along-side co-workers
Cares for personal hygiene needs
Responds appropriately to social contacts
Manages free time during breaks

III. Socially Appropriate Behavior

Works continuously without disruptions
Works without displaying/engaging in major disruptive behaviors
Accepts correction/supervision without becoming upset
Exhibits acceptable behavior during break time

IV. Rate and Production

Works continuously
Leaves job site only at appropriate times
Works with limited supervision
Works independently and increases production
Maintains a reasonable production rate across time
Transitions to new task in reasonable period of time with adequate productivity

V. Accuracy and Quality

Completes tasks with sequenced steps
Demonstrates consistency over time
Demonstrates ability to prepare work area
Demonstrates ability to do a variety of tasks and maintain quality

- The above must be taught to satisfy behavioral expectations existing in specific work settings and situations. It is essential to teach work behaviors in context and in the natural work setting. (Note: This table and the following section is modified from Sitlington, DeWeese, & Dalrymple, 1986).

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WORK BEHAVIOR: *COMMUNICATION*

Initiating contact with the job coach or supervisor for assistance, communicating basic needs, and understanding work routines and expectations are all essential communication skills required in any work environment. Due to impairments in communication skills displayed by individuals with autism, their programs will require ongoing training in this area. The development of individualized communication goals and objectives should be based on the person's current communication ability and should be developed utilizing a longitudinal approach.

An assessment and consultation by a speech and language clinician is recommended to determine the individual's expressive and receptive skills. Both receptive and expressive skills are required in vocational settings. While expressive skills are more easily observed, an individual's receptive skills affect both instructional approaches and training outcomes. Also, the speech and language clinician can help to determine which augmentative communication system seems appropriate for a specific individual, whether verbalizing seems the best mode for expressive communication, or a combination. The clinician can train staff members so that they develop and implement functional and meaningful communication instructional strategies. The following are sample communication skill objectives for an individual with autism at a community employment site.

Sample *Communication* Objectives Embedded in Activities

Example 1: While working on a packaging task at Sunrise Publications, Carl will raise his hand and say "I'm finished" when the designated task amount (indicated by either the amount set out to do or the completion of a jig) is completed 80% of the charted time.

Example 2: Presented with three picture choices of jobs that need to be done at Lenny's restaurant, Susan will indicate her preference of job order within 15 seconds, 80 of the charted time.

Example 3: When bussing tables in a convalescent center dining room, Kari will say, "Take tray please?" before taking the residents' trays and will respond appropriately to their response, using environmental cues 80% of the charted time.

WAYS OF DEVELOPING WORK *COMMUNICATION* BEHAVIOR

Environment:

Specific suggestions for structuring the environment to promote efficient *communication* include:

- Teach in the natural setting.
- Develop community jobs without using the "readiness" model; the association of particular environments with specific expectations makes communication more efficient and reduces both mental and physical confusion.

- Establish work stations for specific activities.
- Purposely remove parts or needed materials from the work stations to promote the need to request materials and tools.
- Provide a variety of jobs and encourage individuals to make choices.

Structure/Routine/Schedule:

Specific suggestions for using structure/routine/schedule to promote efficient *communication* include:

- Communicate structure through the use of visual/written/picture schedules that can be moved by using velcro or inserting in plastic holder.
- Teach situation and individual specific methods of communication in natural settings.
- Teach activities through pictured or written task sequences, i.e., task analysis.

Materials and Supports to Develop *Communication*

- Use "cue cards" with situation specific responses at the work station, e.g., "I'm finished", "help please", "bathroom please " (works as a situation specific communication board for some nonverbal individuals).
- Use visual cues to help individuals locate the appropriate work station or materials, e.g., color coded labels, pictures/photographs, building layouts and maps.
- Use charts, labels, pictures/photographs, etc. of break time activities and refreshments for individuals to use in making choices and following routines in the break time area. A sequence to help understand break time can be pictured.
- Use environmental labels, job charts, and pictures to facilitate communication in community vocational settings.

Reinforcements:

Specific suggestions for using reinforcement to promote the development of increasing *functional communication* include:

- Create the need to communicate. Control materials so that an individual needs to request more materials to finish a task. Give the individual faulty or incorrect tools that need to be replaced so the individual needs to ask for help, e.g., a task requiring the use of a stapler or tape can be structured so that the individual runs out of staples or tape and needs to communicate "more" or "help".
- Reinforce communication or attempts at appropriate communication (shaping).

WORK BEHAVIOR: *SOCIAL SKILLS*

Interacting with classmates, teachers, co-workers, and supervisors, working alongside others, caring for personal hygiene needs, responding appropriately to social contacts, and managing free time during breaks are all essential social skills in any work environment.

People with autism do not understand social rules. They are not aware of various messages given through body language or voice tone. They take what is said, including jokes, irony, or play on words literally. They do not have the ability to read emotions appropriately and are unable to pick up on subtle behavioral cues, such as signs of boredom, from others. Rarely do they participate in typical reciprocal dialogue, and they may say things that have no relationship to the conversation or event at hand. Many adults with autism are often removed or excluded from job opportunities and community participation because of inappropriate social interactions or lack of social skills training. Therefore, work environments need to emphasize th importance of ongoing social skills training in the natural settings.

The following ar sample social skill objectives for an individual with autism at a community employment site:

Sample *Social Skills* Objectives

Example 1: Upon entering the Girls' Club, Glenn will greet the receptionist by saying "hello" and begin his janitorial/cleaning routine 80% of the charted time.

Example 2: Kari will independently follow a written break time checklist routine: buy snack, choose activity, and remain in the employees' break area until back-to-work signal is sounded 80% of the charted time.

Example 3: During work time at First National Bank, when Ralph is upset, Ralph will leave the work area and go to the designated "cool off" area, pull his relaxation card from his pocket and follow his written relaxation routine, and then return to his work area 80% of the charted time.

WAYS OF DEVELOPING *SOCIAL SKILLS* WORK BEHAVIOR

Environment:

Specific suggestions for structuring the environment to promote efficient *social skills* include:

- Provide instruction for precise setting/situation appropriate behaviors.
- Model and rehearse with peers/co-workers.
- Provide activities that are shared and modeled.

Structure/Routine/Schedule:

Specific suggestions for structure/routine/schedule/to promote efficient *social skills* include:

- Structure social environments that facilitate inclusion and promote participation.
- Establish rules for stressful times, have them visually displayed and rehearse/practice them several times daily, so they can be accessed readily when needed.
- Build in daily schedule/times to discuss favorite topics - using a topic wallet, magazine or newspaper and choice, or do favorite activities.
- Provide written or picture sequences for break time.

Materials and Supports to Develop *Social Skills*:

- Written/picture/visual rules of expectations.
- Breaktime routines-teach social interaction skills.
- Topic wallet and times to use it with others.
- Items and place to do favorite activities.
- Peer tutor/advocate/mentor program at work site.

Reinforcements:

Specific suggestions for using reinforcement to develop *social skills*:

- Create the need to use appropriate social skills by utilizing natural environments with sociable peers
- Recognize and reinforce appropriate social skills through shared activities of mutual interests.
- Make sure appropriate social skills get the person the things that s/he likes.
- Teach peers and other co-workers to reinforce appropriate social skills.

WORK BEHAVIOR: *SOCIALLY APPROPRIATE* BEHAVIORS

Working continuously without disruptions, accepting correction/supervision without becoming upset, and exhibiting acceptable behavior during break time are all essential appropriate behavior skills in any work environment.

Behaviors sometimes associated with people who have autism include hitting, property destruction, head banging, finger-flapping, rocking, and biting. Although these behaviors are exhibited by many people with autism, it is important to realize that they are not symptoms of autism. Instead they are responses to the environment, resulting from communication, social and/or cognitive difficulties (Donnellan, Mirenda, Mesaros, & Fassbender, 1984).

These behaviors are often the major reasons why many adults with autism are excluded from job opportunities. Parents, staff, and the individual need to overcome these behavior problems to realize success in a job. Therefore, work environments need to emphasize the ongoing assessment of behaviors to determine the purpose of the behavior. Once the purpose of the behavior is determined new skills to replace the interfering behavior can be developed.

The following are samples of socially appropriate behavior skill objectives for an individual with autism at a community employment site.

Sample *Socially Appropriate* Behavior Objectives

Example 1: Carl will be provided information visually on his daily schedule board when a change in routine is going to occur and be able to cope with the change without displaying the behavior of throwing objects 80% of the charted time.

Example 2: While working a 90 minute period on rolling silverware at Noble Romans, Janice will point to a picture on her communication board, "I need a break", instead of pushing materials on the floor 80% of the charted time.

Example 3: Dustin will work quietly (without singing or yelling) for a sixty minute time period designated by a digital timer while sorting credit card slips for J.C. Penny's department store 80% of the charted time.

WAYS OF DEVELOPING *SOCIALLY APPROPRIATE* WORK BEHAVIOR

Environment:

Determine and analyze the purpose of behavior.

- Be consistent and clear with environmental expectations like clocking in and being finished.
- Keep the environment ordered, and predictable, and provide understandable information about changes.
- Beware of sensory stimulation that may bother the person with autism.

Structure/Routine/Schedule:

Specific suggestions for using structure/routine/schedule to promote *socially appropriate behaviors*:

- Changing an individual's schedule to avoid problem times or situations, i.e., intermixing a non-preferred activity with a preferred activity, temporary change - individual/co-worker dynamics.

- Individualizing routines and schedules, i.e., task directions that are effective for most people may not be for another individual and may even cause frustration.

- Being clear about the order of activities and what completion means.

Materials and Supports to Increase *Socially Appropriate* Behaviors

- Practice a written or pictured rehearsal of positive behaviors that are opposite from negative behavior. For example, Keri often vocalizes loudly while working. When Keri sits down to begin work, the job coach can draw her attention to the card and rehearse the behavior, e.g., "work quietly" (she may need to experience and learn what this means).

- Use tokens (chips, coins, checks) as a means of communicating performance.

- Try head phones or ear plugs to assist with behaviors that could be due to nose level in the work areas.

Reinforcement/Expectations:

Specific suggestions for using reinforcement to enhance *socially appropriate* behaviors:

- Ignore/redirect inappropriate or disruptive behavior while modeling appropriate behavior, e.g., when Jane is at her work station and begins to search the environment for more work and is redirected back to her work station, she becomes mildly aggressive, e.g., pinches. An appropriate behavior, like signing "want" can be modeled and the goal of getting more materials accomplished. The inappropriate behavior of pinching is unnecessary, if the purpose of the behavior was to get help to receive more materials.

- Reinforce and pay attention to appropriate behavior.

- Teach efficient, functional skills that fulfill the same purpose to replace the interfering behaviors.

WORK BEHAVIOR: *RATE AND PRODUCTION*

Working at a job continuously, leaving the job site or work station only at appropriate times, transitioning to a new activity in a reasonable period of time, working independently, and maintaining a reasonable production rate are all essential rate and production factors needed for a job.

The ability to work continuously affects the production rate of an individual. People with autism can have high production rates and efficient quality of work as long as the activity is motivating, the activity has meaning, a variety of jobs is offered from which to choose, and the person has clear expectations and understands the activity.

The following are sample rate and production objectives for an individual with autism at a community employment site.

Sample *Rate and Production* Objectives

Example 1: Paul will fill picture template (80 forms) twice in a sixty minute time period at Goodrich factory representing a rate production of 50% of the work norm, and maintain this production rate for four pay check periods.

Example 2: David will use a written checklist at Ramada Inn and complete the cleaning room sequence in a fifteen minute time period 80% of the charted time.

Example 3: Jake will work close to two other dishwashers at Holiday Inn with no reduction of the teams' production rate over a fifty minute period 80% of the charted time.

WAYS OF DEVELOPING *RATE AND PRODUCTION* WORK BEHAVIOR

Environment:

In general manipulation of the environment can promote and increase the rate and production work behavior. Specific suggestions in the previous "environment" sections are applicable to rate and production. These include factors such as the placement of materials, tables and charts, the order of the materials, the understanding of beginning and end, the environmental considerations of noise, light, movement, and other workers.

Structure/Routine/Schedule:

Rate and production are affected by the type of supervision and training that is provided. Each person with autism in the work environment may require an individualized structure/routine/schedule and a different type of supervision and training.

Specific suggestions focusing structure/routine/schedule to promote *rate and production* include:

- Teaching the job in a consistent way without reliance on verbal cues and constant supervisor presence.
- Use picture or written check-off lists.
- Use templates to provide a clear cue for beginning and end.

Using Materials and Supports to Promote *Rate and Production*

- Use real materials and actual work in work settings.
- Use visual materials/enablers, i.e. replace verbal instructions with written words or pictures.
- Individualize task analysis to increase speed.

Reinforcement/Expectation:

Reinforcement of abstract behaviors such as working faster are especially complicated when teaching individuals with autism. This is because they are usually not competitive. They lack the understanding of the relationship between passing of time and production.

Suggestions for using reinforcement/expectation to promote increased *rate and production*.

- Use "target amounts" rather than time frames to create success.
- Provide clear expectations of how long work will last by times or clocks.
- Provide positive verbal praise.
- Provide a variety of reinforcers from which to choose once work is completed.
- Communicate contingencies clearly and visually.
- Provide choice of jobs and teach how to make choices.
- Work with good models.

WORK BEHAVIOR: *ACCURACY AND QUALITY*

Demonstrating consistency over time, the ability to prepare the work area, the ability to do a variety of tasks, and the ability to maintain quality are all essential accuracy and quality skills in any school/work environment.

Individuals with autism can learn to do activities with a great deal of accuracy and quality. It is essential that the job coach knows the steps of the job well before teaching the job to the individual. The person with autism will learn the job exactly the way it is taught, therefore if the job is taught inaccurately the learner will also perform it inaccurately.

The following are sample accuracy and quality objectives for an individual with autism at a community employment site.

Sample *Accuracy and Quality* Objectives:

Example 1: Frank will follow the picture sequence of making twenty personal pan pepperoni pizzas at Pizza Hut, with a maximum of two nonverbal cues per pizza, 80% of the charted time.

Example 2: Kari will follow the assembly routine for coiling tubes that package the catheters for Cook, Inc. with 90% accuracy.

Example 3: Working within a 50 minute period of stocking shelves at Krogers, Brian will use a check list and accurately stock and match the products 80% of the charted time.

WAYS OF DEVELOPING *ACCURACY AND QUALITY*: WORK BEHAVIORS

Environment:

Specific suggestions for using the environment to promote *accuracy and quality* include:

- Increase individual/staff ratio at the beginning of teaching a new job.
- Provide activities that are consistent with the goal of increased independence.
- Provide activities that will create success.
- Gradually increase the percentage of time in the training experiences as the individual becomes successful.

Structure/Routine/Schedule:

Specific suggestions for using structure/routine/schedule to promote *accuracy and quality* include:

- Provide pictures of the finished work activity.
- Use task analysis - written, pictured.
- Teach the job with pictures, written sequences, and modeling.

Using Materials and Supports to Promote *Accuracy and Quality*:

- Use real materials, not simulated work.
- Use visual material.
- Use models who work accurately.

Reinforcement/Expectation:

Meeting the expectation of "finishing" the job and being correct often plays as large a part in increasing accuracy as an external reinforcer.

Specific suggestions for using reinforcement/expectation to promote *accuracy and quality*:

- Teach the job correctly and give feedback positively.
- Maximize success by teaching self checking and monitoring.
- Provide opportunity to do the jobs the person does best.

- SUMMARY -

In conclusion, it is these work behaviors: (a) communication, (b) social skills, (c) appropriate social behaviors, (d) rate and production, and (e) accuracy and quality that are crucial factors for entering community employment (Mithaug, Mar, & Stewart, 1978). People with autism face many more difficult obstacles in gaining and keeping employment than individuals with other disabilities (Blake, 1990). A job is more than a task, it requires appropriate social and communication skills, all skills that can be difficult for the person with autism. Therefore, it becomes critical for schools and adult service providers to incorporate these working behaviors as major components of the individual's education/habilitation/program plan.

Section 3

TRANSITION

Introduction and Purpose

A parent, a teacher, an adult service provider, an employer all have the common goal of enhancing the success and independence of a son/daughter, student, or employee with autism. This section provides suggestions to help ensure a smooth and successful transition from school to work for the person with autism.

Why is transition planning crucial for the person with autism?

People with autism often rely on familiar routines, familiar people, and familiar environments to understand the world around them. Because they have difficulties understanding, organizing, and using cues in functional ways, they need to be taught in each specific situation through a planned sequence. Change is usually difficult; new expectations are hard to understand, and anxiety is often high. External stimuli can be distracting, and it is often difficult to attend to the relevant cues. By providing a longitudinal and functional vocational school curriculum that teaches the person with autism to work in real jobs with others and communicate with others, transition to the work world will be more successful.

What is transition?

The passage from high school to employment is a major life transition. It begins with a functional school program that prepares the student with the necessary skills for community living and work. Transition is successful when the person with autism enters employment and is integrated into community life or goes into post secondary training.

More people with autism are now living in their communities and attending local schools. Service providers and employers need to begin asking questions and perhaps shifting ways of thinking about some of the members of their community. Although service providers, employers, and members of the community may not be parents of individuals with autism, they are still responsible for helping these people become as successful and independent as possible. It is not the sole responsibility of parents to advocate and struggle for the rights of their children with autism, especially when they become adults. We need to begin thinking in terms of partnerships and ownership and the well being of our community as a whole; only then can we work together as a cohesive unit with a common goal.

Transition from school to work can be thought of as a three step process (Wehman, Dregel, Barcus, & Schalock, 1986) that includes: (a) longitudinal educational programming, (b) formal planning for the movement form school to employment, and (c) the creation of multiple, meaningful employment options.

An appropriate educational program is the **foundation** of a successful transition and is made up of a functional curriculum in an integrated school environment with community-based instruction. A functional curriculum addresses the development of work skills such as communication, rate and production, accuracy and quality, social skills, and socially appropriate behaviors. Formal planning for the movement from school to employment is the **process** of transition and is comprised of individualized

plans that formalize transition responsibilities and ensure adequate planning. Consumer input from the parents and students as well as from interagency cooperation are vital components of the process. The creation of multiple, meaningful employment options is the **outcome** of the transition.

A successful transition leads to employment in the community. The type of employment will vary. Depending upon the need for supports, the individual with autism can work in individualized supported employment, enclaves in industry, mobile work crews, and benchwork jobs (Mank, Rhodes, & Bellamy, 1986).

Why each person is an important participant:

An individual with autism is the consumer of services. Participation in meetings concerning employment is based upon the person's strengths and interests. The individual with autism can participate in possible job choices by a review of responses to past work experiences and/or by incorporating meaningful information into meetings.

Parents are the most informed and knowledgeable persons about their child. Parent's participation in the transition process with teachers and adult service providers is important not only as advocates but also as consumers of services on behalf of their son or daughter (Wehman, Kregel, Barcus & Schalock, 1986).

A **teacher** is vital in providing an effective functional curriculum that will prepare the student for post high school life. Collaboration with parents and adult service providers will ensure a smooth transition without interruption (Wehman, Kregel, Barcus, & Schalock, 1986); Dalrymple & Angrist, 1986).

The **adult service provider** is the key in providing options for services after high school and ensuring their availability. Commitment to and support for the client must be long-term. Respect, knowledge, and belief in the success of the individual is vital.

An employer is crucial for providing the opportunity for the employee with autism to obtain success and independence in the work place. The employer acts as a bridge between the person with autism and the community. Willingness to help those with severe disabilities lead a more meaningful life and demonstrate their successes will cause attitudes of others to change and improve.

What is Supported Employment?

The emphasis of supported employment is on real work for real pay with ongoing, time unlimited support (Parents' Alliance for Transition and The Task Force on Education for the Handicapped, 1990). Currently 20 hours per week is the minimum standard of supported employment. However, this is expected to change. It is critical to recognize that the person with autism may need to start working less hours and gradually increase to the expected hours per week. The federal guidelines define supported employment (Grarder, Chapman, Donaldson, & Jacobson, 1988) as paid employment that is:

- For persons with developmental disabilities for whom competitive employment is unlikely and who, because of their disabilities, need intensive, ongoing support to perform in a work setting;

- Conducted in a variety of settings, particularly where persons without disabilities are employed;

- Supported by any activity needed to sustain the paid work of persons with disabilities, including supervision, training, and transportation.

Values of Supported Employment

Supported employment requires the belief in two principles. First, one must value integrated work for persons with autism. Second, one must recognize that even though jobs can't be guaranteed, supported employment must proceed (Gardner, Chapman, Donaldson, & Jacobson, 1988). No one is assured that a job lasts forever; however, most people still continue working in the community. They may retrain and look for a new job or may be able to secure another job using networking and supports.

RESPONSIBILITIES FOR THE TRANSITION PROCESS

The Transition Responsibility Intra-Agency Agreement

A cooperative agreement between (1) the Indiana Department of Education (DOE), (2) Department of Mental Health (DMH), and (3) Department of Human Services, Office of Vocational Rehabilitation (OVR became effective May 1, 1990. The agreement defines the responsibility of each agency as follows:

The Indiana House Enrolled Act No. 1231 states that the Department of Vocational Rehabilitation is to identify and be actively involved with each student with a disability who will benefit from adult services after high school. OVR involvement is to begin three years before the student's estimated time of departure from high school.

The school is responsible for initiating Transitional Services by identifying students who will benefit from adult services and transferring the identified student's special education information to OVR three years before the student's last school year. The school is to provide a resume of the student's accomplishments annually (Appendix I). At this time the OVR Counselor assumes the role of advocate/consultant. Formal application to OVR occurs during the next-to-last school year.

When the school makes the initial contact, OVR assigns a local VR Counselor who will send a written response to the family or student and the school. The information is processed and recalled every twelve months until the formal application is signed or the student completes his/her education, so the counselor is aware of the students academic or educational progress.

The following list provides a more complete explanation of the responsibilities for each party.

Adult Service Provider Responsibilities:

1. Identify a person to be the primary liaison with schools.
2. Work with schools to develop supported employment.
3. Orient staff to goals/operation of school system.

4. Work with schools to develop forms/data systems to substitute for traditional vocational evaluation procedures.
5. Work with schools and post school agencies to develop cooperative information systems.
6. Collect and publish data on outcomes experienced by individuals in services/programs.
7. Begin involvement with students three years before last year of school.
8. Take formal VR application one year before last year of school.

School Responsibilities:

1. Work with adult agencies to develop forms and information systems to substitute for vocational evaluation procedures.
2. Provide staff orientation to supported employment provider.
3. Modify existing staff positions to support employment training.
4. Identify a person to coordinate program.
5. Develop program materials and job development forms.
6. Develop a bank of work training sites in the community.
7. Develop a system to collect graduate follow-up information.
8. By April 1, three years before student's last school year, provide school information to VR with parent permission.
9. Develop resumè to be sent annually to VR.
10. Initiate OVR referral for formal application.

* *An abridged version of the school and vocational rehabilitation responsibilities is provided on page 35.*

Parents/Advocates Responsibilities:

1. Participate in as many IEP meetings as possible and participate in making decisions regarding job training, integrated classes, and all aspects of your child's program plan.
2. Sign release of information exchange with OVR by March 1 of student's freshmen year.
3. Monitor the educational/transitional process (e.g., school and OVR responsibilities).
4. Complete formal application for OVR services during the next to last school year of your son/daughter.

(The list of responsibilities was in part adapted by Parents' Alliance of Transition - a component of the Center for School and Community Integration at the Institute for the Study of Developmental Disabilities and The Task Force on Education for the Handicapped. 1990).

SCHOOL AND VOCATIONAL REHABILITATION RESPONSIBILITIES

(Based on the Indiana House Act 1231 and the Cooperative Agreement between Indiana State Agencies regarding Transition Services)

Before January 1 of the year that is three years before the student's last school year (usually freshman year) the process must begin.

School Corporation:

1. At the Case Conference/Annual Case Review Meeting, the students are identified who are likely to benefit from adult services. People with autism are likely to benefit.

2. The local rehabilitation counselor is notified to attend the above stated Case Conference/Annual Case Review Meeting.

3. By January 1 of the freshman year give the student/parent "consent to release information" form to transfer student's school information to OVR. Also provide information to the student/parent prepared by OVR describing adult services.

If the Consent Form is Signed and Received By the School Corporation by March 1, the:

School Corporation:

1. Transfers information to local vocational rehabilitation counselor before April 1. If consent is returned after March 1, school transfers information within 30 days.

2. Keeps OVR updated on changes in IEP, etc., and sends annual resumè.

3. Schedules activity to enable OVR counselor and parents to meet about OVR services.

4. Provides services according to Federal and State Laws.

5. Initiates referral for formal application of VR services by next-to-last school year.

Vocational Rehabilitation:

1. Receives information from school corporation.

2. Assigns local VR counselor.

3. Sends written response to parents and school reiterating information received and providing additional information about VR services.

4. Attends IEP conferences.

5. Serves as advocate/consultant to student and family.

6. During next to last or junior school year, takes formal application for services.

7. Provides on-going adult services to those who meet eligibility for VR services during the next to last school year.

WHAT DOES THE OFFICE OF VOCATIONAL REHABILITATION DO?

The Office of Vocational Rehabilitation (OVR) may be responsible for vocational services for students who have:

1. Graduated from, or

2. Opted to terminate (with parental consent before age 17) her/his program of secondary education, or,

3. Been determined by the Case Conference Committee to no longer benefit from the Special Education program, or

4. A determination by the OVR Counselor that it is in the best interest of the student for OVR to assist in the acquisition and support of a community-based placement in an integrated setting to ensure the student's transition from school to work,

and meet the following OVR eligibility criteria:

1. An individual must have a physical, mental, or emotional disability:
   a. which materially limits/contributes to limiting an individual's activities or functioning, and
   b. which, for the individual, constitutes or results in a substantial handicap to employment by directly or indirectly preventing her/him from obtaining, retaining or preparing for employment consistent with her/his capacities and abilities, and

2. There must exist a reasonable expectation that vocational rehabilitation services will benefit the individual in becoming employable.

For eligible individuals, the following services may be authorized:

1. Ongoing diagnostic and evaluation services.

2. Counseling and guidance, including personal adjustment counseling, maintenance of a counseling relationships throughout an individual's program of services, and referrals necessary to help individuals with disabilities secure needed services from other agencies.

3. Physical and mental restoration services.

4. Vocational and other training services including personal and vocational adjustment training books, tools, and other training materials.

5. Placement in suitable employment and follow-up services.

6. Post-employment services consisting of services 1 through 5 of this section, necessary to assist individuals with disabilities in maintaining suitable employment.

7. Services to support 1 through 6 of this section.

(from the Cooperative Agreement between Indiana State Departments regarding Transition Services)

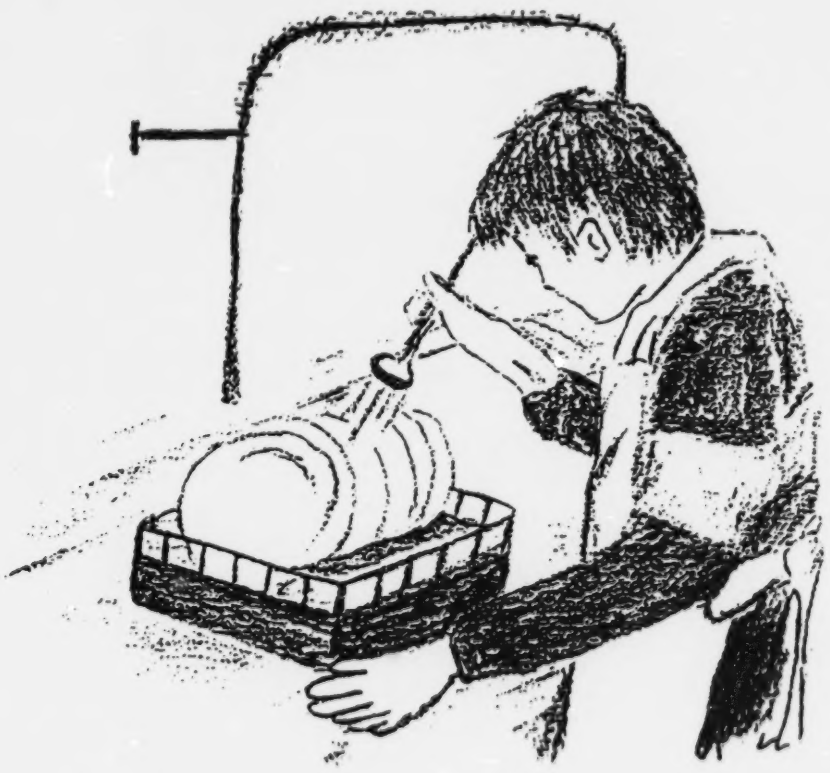
Responsibilities: The Transition Planning Timeline

Many persons play key roles in the transition phase. The following chart provides a quick reference.

H.S. Freshman IEP 14-15 years	Sophomore IEP 16-17 years	Junior IEP 17-18 years	Senior IEP 18+ years
School:			
Suggest IEP goals			Complete resume
Select integrated courses			Train job skills
Identify freshman training experiences	Review/select job to sample	Identify final job	Build job supports
Develop initial resume	Update resume	Update resume forward to VR and employer	Begin transfer job coach to VR
Recommend length of stay in high school/ include in IEP	Review length of stay in H.S.	Initiate VR referral	
Invite VR and set up appts. for referrals		Train job skills	
Send school information to VR		Build job supports Target paid employment sites	
Parents:			
Participate in IEP process			
Sign release of information for VR		Make formal application for OVR	

Responsibilities: The Transition Planning Timeline

Freshman IEP 14-16 years	Sophomore IEP 16-17 years	Junior EIP 17-18 years	Senior IEP 18 + years
Vocational Rehabilitation:			
Creat file/database of students in transition	Update database of people in transition	Receive formal application for OVR services	Assume service responsibilities
Attend IEP conference		Refer student to supported employ-ment	Serve as advocate
	Review progress		



RELATED FEDERAL LAWS

Federal Public Law 94-142

The Education for All Handicapped Children Act of 1975 (P.L. 94-142) set forth the national policy that education must be extended to children with disabilities as their fundamental right. This law was based on the premise that all individuals must be educated in order to become self-sufficient and to survive in society

1. Provide a free and appropriate public education to all children with handicapping conditions.

2. Provide individuals with exceptional needs with an education in the least restrictive environment based on individual needs.

The provision of services by PL 94-142 includes these conditions:

1. Each individual with exceptional needs is guaranteed a culturally unbiased, valid assessment.

2. Each individual with exceptional needs is to have an Individualized Education Program (IEP).

3. Due process procedures have been established to ensure parent and child right.

Federal Education of the Handicapped Act (EHA) Amendments of 1990 (Public Law 101-476)

On October 30, 1990, President Bush signed into law the EHA Amendments. These amendments rename EHA as the **Individuals with Disabilities Education Act** and adds autism to the definition of "children with disabilities." In this act "transition services" is defined as:

> *"A coordinated set of activities for a student, designed within an outcome-oriented process, which promotes movement from school to post-school activities, including post-secondary education, vocational training, integrated employment (including supported employment), continuing and adult education, adult service, independent living or community participation. The coordinated set of activities shall be based upon the individual student's needs, taking into account the student's preferences and interests, and shall include instruction, community experiences, the development of employment and other post-school adult living objectives, and, when appropriate, acquisition of daily living skills and functional vocational evaluation."*

This act also requires a student's IEP to include, beginning no later than age 16, a **statement** of needed transition services. Rehabilitation counseling and social work services is added to the definition of "related services." Autism is included as a separate category for eligibility.

The Federal Rehabilitation Act of 1973

The purpose of this law for persons with disabilities is to support development and implementation of vocational programs and independent living through research, training and services. The responsibilities of the Vocational Rehabilitation Counselors as listed previously.

Federal Americans with Disabilities Act

The Americans with Disabilities Act (ADA) was signed into law July 26, 1990. The purpose of the ADA is to extend to people with disabilities civil rights similar to those now available on the basis of race, color, sex, national origin, and religion through the Civil Rights Act of 1964. It prohibits discrimination on the basis of disability in the private sector and in state and local governments, public accommodations and services, including transportation, provided by public and private entities.

Two years following enactment of the Bill, the Act will apply to all businesses employing 25 or more individuals and then two additional years later to all employing 15 or more.

ADA employment provisions apply to employers, employment agencies, labor organization, or joint labor-management committees.

ADA requires equal opportunity in selection, testing and hiring of qualified applicants with disabilities and equal treatment in promotion and benefits similar to other civil rights legislation. ADA requires reasonable accommodation for workers with disabilities when such accommodations would not impose "undue hardship." Reasonable accommodation is a concept already familiar to and widely used in today's workplace.

Indiana State Laws

Indiana House Enrolled Act No.1789

This Act states that three years before the last school year, the school is to identify each student with a disability in the school corporation who might benefit from ongoing adult services. This is especially relevant for the student with autism because the need for transition and early training is crucial.

Before January 1 of the school year that is three years before the last school year, typically the freshmen year, the school should give parents/guardians consent form for release of information and a copy of services of Vocational Rehabilitation in order to determine the student's eligibility.

If consent is signed and received by March 1, the school should transfer information to the Vocational Rehabilitation Counselor **before April 1** of the "freshmen year", otherwise the school transfers information within 30 days after it's received.

Indiana Article 7

Indiana Article 7 guarantees a free and appropriate education for students ages 6 through 18. Autism was added as a handicapping condition to Rule S-1 (now called Article 7) on March 15, 1989. The implications for the addition are as follows (IRCA,1989):

1. The primary handicapping condition of all students who have autism should be listed as autism on their Individual Education Plan (IEP).

2. The determination of eligibility needs to be decided by an interdisciplinary team that assesses the student and examines the profile that the individual presents to determine if the DSM-III-R definition

is appropriate. Assessments may be compiled from a variety of sources, but an educator, speech/language pathologist, social worker, psychologist and special education administrator would probably be part of the interdisciplinary team. Medical information might be important to compile and parent input is vital. Previous diagnoses of autism are appropriate to use.

3. Placement of a student with autism must be determined by the needs that the individual presents. Needs must be determined first, then any special education, regular education, or combination of placements can be offered that will meet the student's needs in the least restrictive setting. No longer is autism considered to be under the emotional handicapped category.

4. Because impairments in communication and social interaction are part of the characteristics of autism these must be addressed in the needs.

5. If specific behavior(s) interfere with learning or make placement in the least restrictive environment problematic, a behavior plan addressing non-aversive interventions to increase or decrease behaviors must be designed and implemented by teachers and support staff who have received training in autism.

DUE PROCESS PROTECTIONS

Due process is the constitutional right to appeal any decision regarding assessment, identification, and placement or the provision of a free, appropriate public education. Many of the rights listed above are protected under DUE PROCESS.

Both a parent and a student are guaranteed and may initiate procedural due process protections in any decision regarding, and resulting from, the pupil's identification as an individual with exceptional needs.

What due process protections are included for parents and students?

1. The student's assessment and the implementation of the IEP.

2. The denial, placement, transfer, or termination of the pupil in a special education or related service program.

When is due process appropriate?

As a legal procedure, due process is a serious and complex matter. Any decision to pursue due process should be preceded by all other means to resolve the issues (Hegenauer, Marinoble, Reifman & Patton).

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Appendices

A. Characteristics of Autism

B. Data of Employment Programs

C. Jobs That People with Autism Have Done Successfully

D. Guidelines for Individual Assessment for a Person with Autism

E. Vocational evaluation Checklist for Individuals with Autism

F. Support Systems

G. Building Independence Through the Use of Adaptations and Enablers

H. Sample Task Analysis

I. Sample Resumè

Appendix A
Characteristics of People with Autism

CHARACTERISTICS (may vary in intensity, degree and amount)

A central nervous system dysfunction
Onset during infancy or childhood
Etiology: unknown - probably a combination of factors

Not caused by parents or poor environment
Undiagnosed in many adults with autism
May be accompanied by other handicaps
Individuals often have had several diagnoses

Cognitive Ability: 60% under 50 IQ, 20% between 50-70 IQ, 20% have no retardation with a few of those being gifted

Varies in degree of both autism and retardation
Differs from person with MR; may be difficult to find appropriate placement

Learning Characteristics:
uneven development within and across skill areas
negative reaction to changes in routine or environment
overly selective to stimuli
difficulty with unstructured time or waiting
may not generalize skills to other areas or persons
difficulty with abstract concepts

Suggested Intervention Strategies:
Adapt and individualize most curricula
Provide a consistent daily/weekly routine
Prepare for changes using written schedules, pictures, etc; desensitize to new places, activities and objects if needed
Plan for "down" and unstructured time
Teach waiting strategies
Teach skills where they will be used, in natural situations; teach skills across all areas whenever possible
Provide concrete activities/tasks with a clear purpose
Use demonstration, modeling, completed models/examples, and shared experiences

Qualitative impairment in reciprocal social interactions:
lack of imaginative play early in life
difficulty relating to other people
fears that are difficult to overcome
lack of awareness of feelings of others
abnormal seeking of comfort when distressed
impaired imitation
impairment in ability to make peer friendships
lack of ability to express or understand emotions
difficulty understanding social cues
avoidance of eye contact or odd use of eye contact
want and need to be left alone at times
will initiate touching, but may not accept from others
inappropriate giggling or laughing

Must teach social skills and social interaction
Structure social interchanges
Utilize and support sociable peers
Respect needs and personal space
Build in time to just observe
Plan for desensitization to fear
Prepare for social situations
Allow time to build trust
Reinforce positive self-concept
Facilitate initiation of interactions
Teach specific social rules
Facilitate interaction through shared activities

Qualitative impairment in verbal and nonverbal communication:
may be nonverbal (approximately 50%)
impairment in nonverbal communication
low spontaneously initiated communication
restrictive modes of communication for some
echolalia
difficulty understanding concepts, long sentences, etc.
problems answering questions
inappropriate timing and content
trouble staying on a topic unless one of their favorites
difficulty in conversing through comments and several exchanges

Know each person's abilities
Teach a functional communication system
Use pictures and visual mode often
Set up opportunities to elicit communication
Reinforce communication
Talk in short sentences
Be direct and concrete
Demonstrate, gesture, and sign when needed
Listen to what they are trying to tell you; determine what their behavior may be communicating

Restrictive repertoire of activities and interests:	
impaired response to sensory stimuli	Control stimuli when necessary
act as if deaf or very sensitive to some sounds	Plan appropriate stimulatory activities
resist change in routine	Use visual means to instruct when possible
lack fear of real danger	Prepare and explain changes
inappropriate attachment to objects	Provide "breaks" from high stimulation
repetitive movements, i.e., spinning, flapping	Provide private time/place when self-stimulation is allowed, if needed
stare at lights, shiny objects, patterns	
impaired response to temperature or pain	Reinforce new activities and interests
enjoy rocking, jumping, swinging	
explore environment by licking, smelling, touching	
Other problems that may be present:	
impulsiveness	Present understandable expectations and rules
aggression	Be consistent
self-injurious behavior	Incorporate behavior plans into positive program
screaming	Understand purpose of behavior
running	Provide space to allow time alone
perseveration (doing things over and over)	Teach new, more useful behaviors
wanting things the same or straight	Be positive
lack of understanding social/sexual rules	Reinforce behaviors that you want
pacing	Use reinforcers that work; review regularly
over-activity	Teach specific, concrete sexual education
Strengths that may be present:	
stamina	Know special skills and interests and incorporate these into work
well-developed gross motor skills	
enjoyment of chores and keeping busy	Use strengths and interests as part of positive program; never use as punishers
able to perform self-care routines	
good long term memory	Use academic strengths in functional, interactive ways
creativity	Develop leisure skills
performing accurate work once task is learned	Include regular exercise
enjoyment of reading even if verbal skills are limited	
some high skills in math such as knowing dates	
Possible medical concerns:	
about 1/4 - 1/3 of people with autism have seizure activity	Be aware of each person's needs and plan for positive strategies that might be necessary
some may be on medication for behavior control	
some have eating problems such as pica, overeating, lack of balanced diet, etc.	Seek an interactive relationship with medical personnel
	Desensitize to procedures, if necessary
some have a history of sleeping problems	
some have a history of toileting problems	
may be insensitive to pain	
some may have allergies	

General - People with autism, like all people, are different from one another. Each one has individual strengths and weaknesses. Each requires a sensitivity to know when to push, when to back off, and when to allow more time. Each is learning to understand the world and needs encouragement and success.

N. Dalrymple, 12/85
Revised 2/91, 8/91, 7/92
Indiana Resource Center for Autism
Institute for the Study of Developmental Disabilities
The University Affiliated Program of Indiana
Indiana University

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Appendix B

McCarthy, Fender, and Fender (1988)

Table 1. *Data from three programs placing persons with autism into employment*

	Program		
Descriptors	CSAAC[a] (Juhrs, 1987)	PIA[b] (Fender, 1987)	TEACCH[c] (Mesibov, 1987)
Supported employment models	Individual and small-group (2-3) placements	Individual placements	Mobile work crews and individual placements
Number of persons placed	60	7	20
Time frame for making placements	6.5 years	1 year	5 years
Average salary	Over $4.00/hour	$3.75/hour	$4.00/hour
Average work (hrs./week)	35	30	20-25
Reasons for job separation	Company moved Client offered promotion	Business closed	Breakdown in system
Job types	Stock clerk Quality-control person Library assistant Liquor control Warehouse worker Bindery worker Printer Electronic assembler Mailing company worker Paper pickers - recycling Lamination specialist T-shirt silkscreening folders Computer cable calibrator Storeroom worker	Grounds maintenance worker Food service worker Motel roomkeeper File clerk Library assistant	Food service worker Manual laborer Accountant

[a]CSAAC = Community Services for Autistic Adults and Children, Rockville, Maryland
[b]PIA = Programs for Individuals with Autism, South Carolina
[c]TEACCH = Teaching and Educating Children with Autism and Other Communication Handicaps, North Carolina

Appendix C

JOBS THAT PEOPLE WITH AUTISM HAVE DONE SUCCESSFULLY
Jobs That Are Repetitious and That Require a Clear Definition of Start and Finish

Bus tables
Unload dishwasher
Put away dishes
Stack wood, boxed, cans, paper, etc.
Put cans on shelves
Put items in place in warehouse
Water plants from a measured device
Put chairs on tables or set out folding chairs
Wipe back of seats in an auditorium or theater
Wipe and stack trays
Deliver milk or other items
Rinse dishes and load into racks
Wrap silverware in napkins
Stock pop machines
Put labels on envelopes using a template
Fold flyers for mailing
Stuff envelopes
Take out trash
Package
Dust library books
Clean buses, cars or parts of
Set tables
Empty ashtrays
Sort clothes or other items
Assemble items of 2 to 4 parts
Fold laundry and put away
Stencil symbol on boxes

Jobs Requiring a Clear Definition of Area/Boundaries
Vacuum halls or other space
Buff floors in halls of other space
Deliver flyers, newspaper, etc.
Mow lawns
Rake leaves
Shovel snow
Pick up papers and trash
Wash windows
Paint
Straighten waiting rooms

Jobs Requiring Longer Sequences
Clean a motel room, office, or home
Assemble more than 5 to 6 parts
Cook

Jobs that require decision making must be taught in a concrete way. These include deciding what is clean and dirty or broken, what needs doing next and what to do if something is missing.

Indiana Resource Center for Autism/Nancy Dalrymple, 1989
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Appendix D

Guidelines for Individual Assessment for a Person with Autism

A. Questions to Answer:

1. Has the person ever been diagnosed as having autism?

2. Does the person have the characteristics of autism?

   If so, the vocational rehabilitation counselor needs to make sure the following collateral information is gathered:

1. Early history
2. Diagnostic information
3. Characteristics over the years
4. Assessments - how recent?
   a. Communication abilities - receptive/expressive
   b. Social skills
5. Previous jobs/work experiences information
6. Level of support - factors that made the person successful
7. Past behavioral problems and resolutions

B. Purchase any missing information. All is essential.

1. Official diagnosis - if needed
2. Communication assessment within a year

C. Questions to have Answered:

1. Does the person have autism? Why or why not*?
2. What are his/her communication skills - receptive and expressive?
3. Could the person benefit from an alternative augmentative communication system?
4. What are the sensory needs?
5. What are the motor, spatial needs?
6. How does the person learn a new job?
7. What training has staff received about autism/teaching/job coaching?
8. What does staff understand about purposes of behavior, communication - behavior link and sensory-behavior link.

F. Purchase vocational evaluation that uses situational assessment methods and use Indiana Resource Center for Autism Vocational Evaluation Checklist (Appendix D).

* ***Note:*** ***If the person has ever been diagnosed as having autism, it is highly probably this diagnosis is accurate since there is reluctance to diagnose and diagnosis of autism made when the person is young is usually accurate.***

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Appendix E

Vocational Evaluation Checklist for an Individual with Autism

What are this persons strengths/limitations?

Worker:_____ **Work Setting:**_____

Evaluator:_____ **Date:**_____

	Can do	Can do w/help	Comments
1. Communication			
Understands verbal language			
Requests things desired/needed			
Expresses refusals			
Engages in social conversation			
Initiates communication			
Uses pictures/gestures to communicate			
Recognizes words			
Comprehends sentences			
2. Social skills:			
Initiates social interaction			
Responds to social interaction			
Shares with peers			
Waits when necessary			
Takes turns with peers			
Models from peers			
3. Work Behaviors			
Works accurately			
Works at appropriate rate			
Follow rules			
Stays on task			
Keeps things in order			
Finishes a job			
Works neatly			
Can do repetitive tasks			
Can do multi-step tasks			

	Can do	Can do w/help	Comments
Can solve easy problems			
Remembers steps in activities			
Can do 2-3 step long sequences			
4. Motor			
Has strength to do job			
Has gross motor ability			
Has fine motor ability to do job			
Has visual motor ability to do job			
5. Functional Academics			
Reads			
Tells time			
Counts			

6. Where/how does this person do the following:	Where	How
Greets people		
Gives eye contact		
Negotiates		
Initiates		
Waits		
Answer questions:		
Who?		
What?		
When?		
Where?		
Why?		
Shares materials		
Shares food		
Responds to compliments		
Initiates comments		
Carries on 4-6 exchanges on a subject		

7. What problem-solving skills does this person have? What does the person do when:	
a. something is missing:	
b. something is too difficult:	
c. routine changes:	
d. someone s/he cares about is absent	
e. doesn't know what to do:	
f. does something incorrectly:	
g. something doesn't work right:	
h. corrected:	

8. During work breaks, does the person:	Yes	No	Sometimes
Imitate what others do?			
Follow a set routine?			
Initiate appropriate things to do?			
Pace or engage in self-stimulatory activities?			
Socially interact with others?			

9. What does this person need to complete a job successfully?	Yes	No	Comments
Desensitization to environment			
Consistent/clear definition of beginning and finish			
What is his or her motivation:			
"likes doing" activities with someone			
"likes doing" something preferred			
"likes doing" something of special interest			
"likes doing" something utilizing strengths			
"likes doing" something to get something later			

10. How well does the person do the following tasks? Length of time can do:	Good	Fair	Poor
Match/sort			
Assemble			
Move items			
Repetitive cleaning			
Sequenced cleaning			
Cooking			
Collating			
Typing			
Filing			
Computer work			
Calculator			

Others: _____

11. What preferences/aptitudes for jobs does this person demonstrate? As reported by:

Family members: _____

_____

Past experiences: _____

_____

Observations: _____

_____

12. Summary:

Vocational assets:

Vocational liabilities and suggestions for support:

Specific recommendations:

Employment plan:

Appendix F

Individual Assessment of Support Systems for a Person

I. What Environmental Support Systems have been used and what ones are needed presently and in the future?

a) structured environments/structured days
b) routines
c) controlled stimuli

1) ordered materials
2) alone time
3) desensitization
4) rehearsal
5) daily routines
6) activity routines

II. What Instructional Support Systems have been used and what ones are needed presently and in the future?

a) visual aids
b) adaptations, enablers
c) communication-expressive and receptive skills
d) prompting-verbal, physical, environmental, modeling
e) positive, clear rules

III. What Motivational Support Systems have been used and what one are needed presently and in the future?

a) control and choice
b) preferences
c) meaningful activities
d) positive people
e) environmental control

IV. What Peer Support Systems have been used and what ones are needed presently and in the future?

a) tutors, advocates, friends
b) shared experiences
c) mentors

V. What Sensory Support Systems have been used and what ones are needed presently and in the future?

a) tactile
b) auditory
c) smell
d) self-stimulatory

VI. What Other Program Support Systems have been used and what ones are needed presently and in the future?

a) relaxation routines
b) errorless learning
c) exercise and fitness
d) program placement

Comments:

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12/92

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Appendix G

Building Independence Through the Use of Adaptations and Enablers

Individuals with autism or other developmental disabilities often show limitations in independence in their homes, communities, and in the work world. People with severe developmental disabilities are often eliminated from community programs and competitive employment because of interpersonal behavior problems brought about by impairment in their ability to communicate and to understand social interactions. Developing teaching strategies to enhance one's strengths and limit the reliance on one's deficits is essential to an individual's programming.

Teaching strategies and methods that use enablers, adaptations, supports, or prosthetics are vital to success. Enablers are created to help cope with an environment. They regulate stimuli, adapt materials to meet individual needs, modify sequences, and provide information in understandable ways. Enablers are as important to someone with autism as eyeglasses are to people with a visual impairment. They are essential for developing independence in an individual who has severe disabilities.

The following are enablers this paper will discuss:

Consistent Routines/Schedules
Knowledge of Expectations
Desensitization Processes
Rehearsal Strategies
Stimulus Cues
Environmental Adaptations
Augmentative Communication
Peer Advocates
Motivational Procedures

Consistent Routines/Schedule

Consistent routines and schedules are necessary to provide the best learning situation for an individual with autism. Also, because most individuals with autism are concrete, visual learners, providing visual materials in the form of wall calendars, written schedules, picture boards to denote events, written steps of a task, or rules stated clearly and visually will aid in the individual's understanding of his or her routines. Other suggestions are:

- A morning routine as shown by a schedule board: get up, wash face and brush teeth, make bed, eat breakfast, pack lunch, go to work.
- Schedule the same activities at the same time each day (or week) and place the pictures, in order, on the schedule board to provide the knowledge and security that persons with autism require. For example, 15 minutes of exercise everyday just before leaving for home, or eating out every Friday night.
- All staff/family know all cue words and become familiar with needed visuals for particular routines. This ensures that all routines are directed consistently.

- Review schedule boards with the individual each morning, or each half day, so s/he knows what will be happening.

- Explain changes in routines through the use of the schedule boards. Actually remove one activity and help the learner put on the new activity.

Consistency in programming provides the structure that is often needed for someone with autism. The success of programs for individuals with autism often depend on how consistent these programs are and how they are presented to each individual. Frustration occurs when the individual does not understand the plans and expectations for the day. Independent behaviors can be increased by using consistent teaching methods that include clearly defined visual materials.

Knowledge of Expectations

While teaching individuals with autism, giving clear instructions or directions is crucial to their understanding of what to expect in their day. Unnecessary words or sentences containing abstract thoughts, such as "in a little while", "just a moment", "just a little bit", etc., often confuse or frustrate someone with autism. Most people with autism are concrete, visual learners. S/he needs to know exactly when an event will occur ("we leave in 5 minutes or when the timer goes off"), and strategies to cope with waiting until the event begins.

Support staff often assume that someone with autism will automatically understand when they are finished with a project or job, that they are to work faster because they will earn more money, or how long 10 minutes lasts. Often, staff or teachers need to clearly state when a project is finished ("You do 15 problems and then you are finished", or "Fill the template two times and then it's break time"). Also, since time itself is an abstract concept, use of timers can clearly define the passage of time and can be used to help someone know when one event stops and another begins.

Other examples are:

- Visual templates specifying the steps to be performed in a set routine.

- A check off list or a sheet of paper marked into squares telling a worker that s/he must put one assembled unit in each box, then s/he is finished.

- A simple chart with a box to mark each step completed and a picture of the reinforcer at the end, telling the worker exactly what is to be done and the reason for working.

- Using the "First _____, then _____" strategy tells exactly what is expected of the person. Examples are "First use the bathroom, then wash you hands", "First go shopping, then we get ice cream", "First set the table, them make the salad."

These strategies tell the individual everything s/he needs to know about that particular order of events or routine. Many times the directive expressed in these terms is enough for the person to understand what s/he is to do. However, supplementing the verbal with a pictured or written sequence is often necessary and facilitates independence in routines.

Desensitization Procedures and Rehearsal Strategies

In many instances, the learner with autism may have unusual anxiety and fears surrounding new or unusual situations, people, places, or routines. Often these interfere or disrupt the successful accomplishment of a task or event. Examples of some fears and anxieties include doors that are open, certain types of medical or dental procedures, loud noises, passing trucks, rain, animals, or other objects, events, or people.

Other examples are:

- Strong obsessions with needing certain objects to be in certain places.
- Particular people being only in particular environments.
- The need to perform a certain ritual such as straightening all the chairs in the room before leaving, or checking the sink drain every time s/he passes the kitchen.
- Not allowing a vending machine door to be opened for servicing.

If an obsession or ritual interferes with programming, a desensitization procedure may be necessary. A desensitization procedure is the gradual introduction or exposure to the particular object or event. During this exposure, the individual is reinforced for remaining calm while the object is near or the event is occurring. The process starts with a short exposure to the object or event, with a gradual increase as the person becomes less anxious. Reinforcement for remaining calm is an important component of the process, keeping in mind the individual preferences of the person.

Many fears/anxieties can be eliminated entirely by prior planning and preparation. If staff or family know that an individual is fearful of new situations or transitions, then before s/he moves to a group home, for example, short visits can take place to introduce the situation gradually. Preparation for next year's class could include desensitization in the spring to the new teacher, new room and new materials; then, only a shorter introduction is needed in the fall. Careful planning is always needed.

Many individuals with autism are burdened with unusual concerns that prevent them from enjoying aspects of their lives and programs. With carefully planned and executed desensitization procedures, these same individuals can improve and enhance their lives.

Rehearsal strategies, like desensitization practices, also help the learner with autism feel comfortable with a particular situation. Many individuals with autism do not need the intense desensitization procedures, but do benefit by short rehearsal strategies. Examples of when such strategies are useful are rehearsing the ordering sequence at a restaurant, practicing a banking sequence, practicing a signature before cashing a check, writing down the grocery list and finding the aisle numbers, and rehearsing an already familiar dental routine.

Rehearsing familiar events and routines before they occur can give the individual with autism the added comfort of knowing that s/he can function in the situation comfortably. Many times that is all the preparation needed to be successful.

Stimulus Cues

Because learners with autism have difficulty processing verbal instructions, they often need to rely on environmental cues. Many times the individual understands what is going to happen by observing what is happening around him/her. Staff or family members can plan for stimulus cues (or programmed environmental cues) to eliminate confusion and the necessity or relying on verbal instructions.

Examples of stimulus cues are:

- Having the same event at the end of every day's program. This would tell the learner when it is time to gather his/her things and get ready to go home.
- Performing the same routine before going out such as turning off all the lights, checking the locks on the door, and turning on the answering machine. When the learner sees the parent or staff member performing these duties, s/he knows that it's time to leave.
- Using the same object to perform the same task each day: a certain bucket is used only for cleaning tables or a certain pillow is kept only for a particular relaxation routine. When the bucket is taken out of the closet, then it is time to start work; when s/he is given the pillow, it's time for the relaxation routine.
- Setting only enough chairs or placements as needed at the table to show where to put the plates and silverware.
- Bringing out everyone's raincoats to let the learners know it is raining and they will need to wear them.
- Mom picking up her purse to indicate it is time to leave (remember, sometimes there are miscues. The learner may expect to go with Mom everytime she picks up her purse).

Stimulus cues can be a valuable, verbal, non-verbal method to increase the learner's independence in his/her everyday activities.

Environmental Adaptations

Adapting the environment and materials to an individual's needs often creates a more successful learning situation. Eliminating objects or routines that might confuse, disorient, or upset a learner with autism can make the difference between feeling comfortable with his/her surroundings or feeling frustrated and anxious. Eliminating loud noises, bright light, messy shelves or materials or decreasing the number of people in a group can help to decrease this anxiety.

One example of adapting the environment is to provide a relaxation area to direct an anxious child or adult to until s/he learns to initiate relaxing. This gives the individual the opportunity and the knowledge of a place to withdraw from an upsetting situation. It also provides the person a place to calm down. This may be as simple as having a bean bag chair in a corner of the room or a particular shelf with the person's favorite toy or object. When anxiety or frustration occurs, the person can independently choose to calm down in this area or can be directed there by the parent or staff.

Teachers or staff often need to analyze materials for particular jobs or tasks to determine if adaptations need to be made for an individual. Once the task has been taught, additional adaptations may be needed if the learner has difficulty with a particular step of the job. Many times, simple adaptations can mean the difference between dependence on staff and individual independence. Adaptations on the job can open up new possibilities for learners by offering them opportunities for competitive employment. Teachers and support staff often utilize creative methods to analyze the best way to meet these needs and offer increased opportunities.

Augmentative Communication

Half of all people with autism are non-verbal, and more are minimally verbal. People with autism often rely on means other than speaking to communicate their wants and needs. The use of sign language, communication boards, or electronic devices can enable learners to better communicate wants or needs in their daily lives. Consistency in the use of the augmentative system will be a major key to its success. The system must be used across all settings and environments; all staff must be familiar with and help initiate its use; and, the system must be functional for the individual.

Individuals with autism are often low initiators of communication. In the beginning, responsibility for the use and maintenance of a system must fall to family or staff. The services of a Speech and Language Pathologist can guide family members or relevant staff in the use of the augmentative system and ensure that the system or format is functional for the individual.

Augmentative communication systems can be quite simple or complex. They can be as small as an index card with a specific order for a specific restaurant or as large as a book with hundreds of labeled pictures. Other examples include small communication books that have been made specifically for a job routine, morning exercise workout, or community outing.

Having an augmentative communication system means that the individual has a better way to communicate wants and needs which otherwise might be exhibited as inappropriate behavior. Increased independence and self-esteem is often a result of improved communication.

Peer Advocates

Peer advocacy programs are used in many school systems and some work sites pairing a person with a handicap with someone who does not have a handicap. Peer advocates can open the door to many social and instructional events which teachers cannot. Peers can teach activities and social gestures and nuances so the learner can successfully interact with a wider group. Some examples of activities that peers could teach are after school games, sports skills, home living skills, community recreation or outings, shopping, and leisure skills. The skills gained through peers often help the individual with autism understand social rules, help to integrate the individual into larger peer groups and may enhance self-esteem. Peer advocates are a valuable resources for teachers, parents, staff, and for the individual with autism.

Motivational Procedures

Many learners with autism are not motivated by the common reinforcers of most people. Often, it is assumed that the individual with autism should be motivated by a monthly paycheck, verbal praise, social groupings such as parties or get togethers, or competition. Staff or teachers are often puzzled when the individual with autism does not respond in the same manner or enthusiasm as others. S/he can be perceived as unmotivated, lazy, or uncaring when responses are not like others. However, with careful analysis of individual likes and preferences, motivators can be found and used effectively.

Examples of motivators for an individual with autism include time spent alone, time to talk to a favorite staff member or teacher, trips to the cafeteria, an exercise routine, a favorite object, music, playing in the water, set amounts of money for a specific treat, getting to perform a favorite routine, sensory objects, sitting at the window, or another favorite activity or object. Each person will need to be assessed periodical for motivators. What motivates a person one week may not motivate him/her the next week. Motivators will change occasionally to reflect new or different interests. Motivation can often be a determining factor in the success of teaching strategies and programs.

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Indiana University
S. Wagner 8/89
Revised N. Dalrymple 9/91

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Appendix H

VOC232 STEPS TASK: Make Bed at Ramada Inn

STUDENT K **SK = skipped, not done (comment should give reason)** **I = independent with minimum distance of 5' between staff and student** **VC = verbal cue**	**EC = environmental cue includes modeling, gesturing, etc** **PC = cues that involve touching the student** **R = refused**

Date: ___/___/___ **Time: ___:___** **Time Finished: ___:___**

COMMENTS should accompany entries of SKP and EC and any other time additional information may be helpful

Steps	#SK	Done	I	VC	EC	PC	R	Comments
1. Sheets - King or double								
2. Put on bottom sheet								
3. Make side even								
4. Sheet - mattress edge								
5. Pull of sheet								
6. Smooth sheet								
7. Tuck in sheet								
8. Put top sheet on								
9. Sides even								
10. Smooth								
11. Blanket on								
12. Blanket sides even								
13. Tuck blanket at bottom								
14. Fold over at top								
15. Bedspread on								
16. Square corners								
17. Smooth bedspread								
18. Bedspread sides even								
19. Fold down bedspread								
20. Pillow case on								
21. Push into points								
22. Put pillow on bed								
23. Fold over bedspread								
24. Smooth bedspread								

VOC232 TASK: Make Bed at Ramada Inn

OBJECTIVE: Will perform 3 community work tasks with increasing independence

Task Description:

STEP 1: Get correct sheets and pillow cases.
Keyword 1: sheets-king or double

STEP 2: Put on bottom sheet.
Keyword 2: put on bot. sheet

STEP 3: Make sheet sides even.
Keyword 3: make sides even

STEP 4: Put bottom sheet edge to mattress edge.
Keyword 4: sheet-matress edge

STEP 5: Pull up sheet.
Keyword 5: pull up sheet

STEP 6: Smooth sheet.
Keyword 6: smooth sheet

STEP 7: Tuck in sheet.
Keyword 7: tuck in sheet

STEP 8: Put top sheet on.
Keyword 8: put top sheet on

STEP 9: Make top sheet sides even.
Keyword 9: sides even

STEP 10: Smooth top sheet.
Keyword 10: smooth

STEP 11: Put blanket on.
Keyword 11: blanket on

STEP 12: Make blanket sides even.
Keyword 12: blanket sides even

STEP 13: Tuck blanket at bottom.
Keyword 13: tuck blanket at bottom

STEP 14: Fold over at top—blanket and topsheet.
Keyword 14: fold over at top

STEP 15: Put bed spread on
Keyword 15: bed spread on

STEP 16: Square bedspread corners to top of bed.
Keyword 16: square corners

STEP 17: Smooth bedspread.
Keyword 17: smooth bedspread

STEP 18: Make bedspread sides even.
Keyword 18: bedspread sides even

STEP 19: Fold down top of bedspread.
Keyword 19: fold down bedspread

STEP 20: Put pillow cases on 1, 2, 3
Keyword 20: pillow cases on

STEP 21: Push pillow into points.
Keyword 21: push into points

STEP 22: Put pillows on bed.
Keyword 22: put pillow on bed

STEP 23: Fold bedspread up over pillows.
Keyword 23: fold over bedspread

STEP 24: Smooth bedspread.
Keyword 24: smooth bedspread

APPENDIX I

SAMPLE HIGH SCHOOL RESUME

Scott
99 Way
Ft. Lee

Age: 20.8

Objective:
To gain a position in which to utilize vocational and domestic skills.

Related Job Training:

Bloomingfoods Cooperative Grocery - cleaned, stocked and straightened shelves on a daily basis; $3.50 an hour.

McDonald's Restaurant - worked as a lobby attendant sweeping floors, wiping tables, emptying trash baskets, cleaning bathrooms, etc; $3.35 an hour.

IU Library Cafeteria - cleaned and wiped tables and chairs after the lunch periods.

Herald Telephone Newspaper - worked to deliver daily newspapers in a residential section adjacent to the IU campus.

Bloomington Convalescent Center - worked to clear tables of lunchtime dishes and then washed tables and all chairs.

Supervised Workshop - works in a Bloomington sheltered workshop to assemble, package, and sort mailings for non-profit organizations.

Strengths:

Well-developed vocational skills, ability to use both fine discrimination and fine motor manipulation, ability to follow 2-3 step directions, ability to communicate his needs, works well within routines, responds well to verbal and nonverbal directions, can work off written schedules, enjoys being around people, dependable, pleasant personality.

Weaknesses:

Sometimes uses verbal communication to delay a task; work endurance is about 1.5 hours; occasionally uses inappropriate social responses; needs occasional cues for thoroughness; tests rules in a teasing way.